

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

PIPELINE ENGINEERING AND SAFETY DIVISION

INCIDENT REPORT

17 Danny Road, Hyde Park, Massachusetts

November 3, 2010

PIPELINE ENGINEERING AND SAFETY DIVISION

17 Danny Road, Hyde Park, Massachusetts

November 3, 2010

NSTAR Gas Company

Estimated Property Damage: \$1,000,000*

Injuries: None

Report Issued – December 4, 2014

* Estimated by the Boston Fire Department

Table Contents

| | | |
|------|---|----|
| I. | INTRODUCTION | 1 |
| A. | Scope of Investigation | 1 |
| B. | Overview of Incident | 2 |
| II. | THE DEPARTMENT'S INVESTIGATION..... | 3 |
| A. | Description of the Site | 3 |
| B. | Emergency Response | 4 |
| C. | The Gas Piping Under Danny Road | 4 |
| | 1. Description of the Gas Main Under Danny Road | 4 |
| | 2. Description of the Gas Service supplying 17 Danny Road | 5 |
| | 3. Leakage Surveys of the Gas Mains and Gas Services after the Incident | 5 |
| III. | EXCAVATION BY DEFELICE CORPORATION | 5 |
| IV. | RECOVERED PIPE SECTIONS | 7 |
| V. | DIG SAFE VIOLATIONS | 7 |
| VI. | FINDINGS | 8 |
| A. | The Incident..... | 8 |
| B. | The Gas Main and Gas Service Under Danny Road | 9 |
| C. | The Recovered Pipe | 9 |
| D. | Dig Safe Law Violations..... | 10 |
| VII. | CONCLUSIONS | 10 |

EXHIBIT LIST

- Exhibit 1: NSTAR Report to U.S. Department of Transportation – Pipeline and Hazardous Materials Administration
- Exhibit 2: Boston Fire Department Investigative Report of Incident at 17 Danny Road
- Exhibit 3: Testimonies Submitted in, DeFelice D.P.U. 11-DS-1, D.P.U. 11-DS-2:
(a) George DeFelice;
(b) George Tabicas; and
(c) Manny Mederios
- Exhibit 4: Water and Sewer Plan, Boston Water and Sewer Commission
- Exhibit 5: Incident Photographs:
5(a) 17 Danny Road, Hyde Park (11-3-10);
5(b) Broken Gas Service - House Side, supplying 17 Danny Road (11-3-10);
5(c) Cut and Capped Gas Service - Street Side, supplying 17 Danny Road; and
5(d) DeFelice excavation on Danny Road (11-3-10)
- Exhibit 6: NSTAR Plan of Gas Piping On Danny Road and Reynold Road
- Exhibit 7: NSTAR Gas Service Card for 17 Danny Road
- Exhibit 8: Statements from NSTAR Gas Employees
- Exhibit 9: Service Valve Photographs:
9(a) Gas Service Valve Box Cover of Gas Service supplying 17 Danny Road (11-3-10);
9(b) Gas Service Valve Box in Relation to Damaged Gas Service;
9(c) Broken Gas Service Valve – House Side, supplying 17 Danny Road (11-3-10); and
9(d) Broken Gas Service Valve – Street Side, supplying 17 Danny Road (11-3-10)
- Exhibit 10: Photographs of Inside Service to 17 Danny Road:
10(a) Displaced and Severed Gas Service Piping Inside of 17 Danny Road; and
10(b) Service Regulator Severed From the Gas Service Piping Inside of 17 Danny Road
- Exhibit 11: DPU Order, DeFelice, DPU -11-DS-1/11-DS-2 (May 29, 2013)

I. INTRODUCTION

A. Scope of Investigation

The Massachusetts Department of Public Utilities ("Department"), Pipeline Engineering and Safety Division ("Division"), pursuant to G.L. c. 164, § 105A and a Federal Certification Agreement as provided for in 49 U.S.C. § 60105, has investigated a natural gas ("gas") release at 17 Danny Road, Massachusetts on November 3, 2010 ("Incident") (Exh. 1).¹ The release of gas contributed to an explosion, fire, and property damage to the dwelling (Exh. 1). The operator of the natural gas facilities at the Incident is NSTAR Gas Company ("NSTAR" or "Operator") (Exh. 1). The Boston Fire Department estimated the damage at approximately \$1,000,000 (Exh. 2). There were no fatalities or injuries as a result of the explosion (Exh. 1).

As part of the Department's annual certification process by the United States Department of Transportation ("U.S. DOT"), the Department must report to the U.S. DOT

¹ Incident means any of the following events:

- (1) An event that involves a release of gas from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:
 - (i) A death, or personal injury necessitating in-patient hospitalization;
 - (ii) Estimated property damage of \$50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost;
 - (iii) Unintentional estimated gas loss of three million cubic feet or more;
- (2) An event that results in an emergency shutdown of an LNG facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident.
- (3) An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.

49 C.F.R. Part 192, § 192.3.

each accident or incident . . . involving a fatality, personal injury requiring hospitalization, or property damage or loss of more than an amount the Secretary establishes... and any other accident the [Department] considers significant, and a summary of the investigation by the [Department] of the cause and circumstances surrounding the accident or incident.
49 U.S.C. § 60105(c).

The purpose of this report is to inform the U.S. DOT as to the cause and circumstances surrounding the Incident.

The Department has established procedures for determining the nature and extent of violations of codes and regulations pertaining to the safety of pipeline facilities and the transportation of gas, including but not limited to, 220 C.M.R. §§ 101.00 through 113.00. See 220 C.M.R. § 69.00 et seq. The Division also enforces the U.S. DOT safety standards for gas pipeline systems as set forth in 49 C.F.R. Part 192 ("Part 192").
G.L. c. 164, § 105A.

B. Overview of Incident

On November 3, 2010, DeFelice Corporation ("DeFelice," or "Excavator") was excavating on Danny Road, Hyde Park (Exh. 3). The excavation work was part of a water main replacement and rehabilitation project that DeFelice was performing on Reynold and Danny Road's under a contract with the Boston Water and Sewer Commission (Exh. 3). The major portion of the project consisted of installing approximately 440 feet of new water main under Reynold Road from the intersection with Chesterfield Street to the intersection of Como Road (Exh. 4).

On November 3, 2010, while operating an excavator machine along Danny Road, DeFelice hit and damaged a one (1) inch diameter NSTAR gas steel service (Exh. 2, 5(b)).

After the gas service was damaged, one of the crew members walked towards the house, smelled natural gas, and told the excavator operator about the conditions (Exh. 3). The excavator operator next severed the gas service, in order to vent the gas to the air (Exhs. 3, 5(b)). The excavator operator and the crew member walked towards the house and knocked on the door to see if anyone was home (Exh. 3). When no one answered, they walked away from the house (Exhs. 2, 3). Shortly afterwards, the house exploded (Exhs. 2, 3, 11, at 1-2). The excavator informed the Boston Fire Department that about 10 to 15 minutes had elapsed from when the gas service was damaged to when the house exploded (Exh. 2, at 1-2).

The first NSTAR personnel to arrive at the scene found the gas service leaking and that a broom stick handle had been jammed into the open end of the gas service that was still connected to the gas main. This had been done in an attempt to slow the escape of gas from the gas service (Exh. 8). The first NSTAR personnel to arrive onsite were able to stop the flow of gas by cutting and capping the gas service (Exh. 8).

II. THE DEPARTMENT'S INVESTIGATION

A. Description of the Site

Danny Road is located in a residential area of Hyde Park, Massachusetts. Most of the homes in the area are single family on individual lots (Exh. 5(a)). The structure at 17 Danny Road was a one story, single-family home. Gas was supplied to it through a one (1) inch diameter steel gas service that was installed in 1960 (Exh. 7). In the basement of the house, the gas service was connected to a service regulator, meter bar, and gas meter (Exh. 8).

The explosion completely destroyed the house (Exh 5(a)) and it also caused damage to eight other houses on Danny Road, Reynold Road and Chesterfield Street (Exh. 5(a)).

B. Emergency Response

The Boston Fire Department notified NSTAR of the explosion and fire at 17 Danny Road (Exh. 8). At approximately 8:52 a.m., NSTAR dispatched emergency response personnel to the site (Exh. 8). NSTAR personnel arrived on the scene at approximately 9:00 a.m. and found a broken one inch steel gas service supplying 17 Danny Road, to stop the flow of gas the broken gas service was plugged and capped (Exh. 5(c), 5(d), 8).

As a precaution and if required, NSTAR checked with their engineering division to determine if the gas main on Danny Road could be shut off from the gas mains located on Reynold Road and Readville Street (Exh. 8). The engineering division determined that this could be done without affecting the system (Exh. 8). NSTAR did not shut off the gas main as the Operator was able to disconnect the gas service at the connection to the gas main on Danny Road (Exh. 8).

NSTAR decided to shut off all gas services within 300 feet of 17 Danny Road (Exh. 8). This was completed at 11:30 a.m. (Exh. 8). The Boston Fire Department allowed NSTAR to begin restoring gas service to the effected customers at 2:00 p.m. (Exh. 8) and gas service to the affected customers was fully restored by 3:30 p.m. (Exh. 8).

C. The Gas Piping Under Danny Road

1. Description of the Gas Main Under Danny Road

The Operator installed a four (4) inch diameter steel gas main underlying the eastern side of Danny Road in 1960 (Exh. 6). The maximum operating pressure ("MAOP") of the gas main is 25 pounds per square inch gauge ("PSIG") (Exh. 7). NSTAR reported that the operating pressure of the main at the time of the Incident was 22 PSIG (Exh. 7).

In 1999, NSTAR installed a thirty three (33) foot section of two (2) inch diameter plastic gas main underlying the eastern side of Danny Road and a portion of Reynold Road (Exh. 6). This section of plastic gas main connected the Danny Road gas main to the gas main underlying Reynold Road (Exh. 6).

2. Description of the Gas Service supplying 17 Danny Road

In 1960, NSTAR installed a one (1) inch diameter forty four (44) foot long gas service constructed of bare steel pipe to supply 17 Danny Road (Exh. 7, 9(c),(d)). The Operator located the service regulator, meter bar, and gas meter in the basement of the house (Exh. 10). NSTAR located a gas service valve eighteen (18) feet, seven (7) inches from the foundation wall (Exh. 7) in the grass area between the sidewalk and street.

3. Leakage Surveys of the Gas Mains and Gas Services after the Incident

Following the Incident, NSTAR shut off gas service to all houses within 300 feet of 17 Danny Road (Exh. 8). NSTAR leak surveyed the area of Reynold Road and Danny Road and the Operator detected no gas leaks (Exh. 8).

III. EXCAVATION BY DEFELICE CORPORATION

The Boston Water and Sewer Commission awarded DeFelice a contract to replace or rehabilitate water, sewer and drain lines in Hyde Park (Exh. 3). The contract in Hyde Park included facilities on Reynold Road between Como Road and Chesterfield Street (Exhs. 3, 4). The plans also showed water drain pipe installation to be done on Danny Road (Exh. 3; Exh. 4).

DeFelice notified Dig Safe systems, Inc. ("Dig Safe") on October 1, 2010, before construction began (Exh. 3). The notification did not call for any markings to be placed on

Danny Road (Exh. 3 and Exh. 11, at 22-27). The area delineated by the Dig Safe ticket request from DeFelice was for Reynold Road from Chesterfield Street to Como Road, from the street to the property line including intersections (Exhs. 3, 11, at 22-27).

DeFelice began the work on October 22, 2010 (Exh. 3). The first part of the projected consisted of installing a temporary water main across Como Road, in front of 31 Como Road, and along Reynold Road to Chesterfield Street (Exhs. 3, 11). While installing this temporary main, DeFelice excavated across Como Road, outside of the area they had identified in their Dig Safe ticket where they would be excavating (Exh. 11, at 12-14). On November 2, 2010, DeFelice contacted Dig Safe, and requested a remark (Exhs. 2, 3). This second Dig Safe request did not mention Danny Road (Exh. 11 at 12-14).

On November 3, 2010, DeFelice began to excavate on Danny Road in an easterly direction (Exh. 3). Adjacent to the excavation and located in the grass area between the street and sidewalk was the gas service valve box for 17 Danny Road; 1 (Exhs. 9(a), 9(b), 11 at 32-33). The excavator damaged the one (1) inch gas service that was located approximately seventeen (17) feet beyond the property line of 17 Danny Road at the intersection of Danny Road and Reynolds Road (Exhs. 9(b), 11 at 25). After damaging the gas service, the DeFelice excavator operator began to hand dig around the damaged gas service, while another employee walked towards the house (Exh. 3). The employee smelled natural gas as he approached the house (Exh. 3). He immediately went back and told the excavator operator who was hand digging around the gas service (Exh. 3). The excavator operator pulled the gas service out of the ground in an attempt to vent the natural gas to the atmosphere (Exh. 3). Then both

DeFelice employees knocked on the door to see if anyone was inside (Exh. 3). As they walked away, shortly thereafter, the house exploded (Exhs. 2, 3).

IV. RECOVERED PIPE SECTIONS

Three sections of the gas service supplying 17 Danny Road were recovered from the scene. The first section was the section of the gas service that had been connected to the gas main in Danny Road (Exhs. 5(b), 9(b)). This section had been cut and capped by NSTAR to stop the flow of gas (Exh. 8).

The second section of the gas service was not capped it was partially located and buried in the sidewalk area (Exh. 5(b)). When NSTAR excavated and exposed this section of the gas service, the curb valve was found to be broken in two (Exh. 9(d)).

The third section of the gas service contained the other half of the broken curb valve and terminated in the basement of 17 Danny Road (Exh. 9(c)). Inside the basement of 17 Danny Road, the gas service had been connected to the service regulator, the gas service pipe was broken at this point (Exh. 10(a), (b)). Installed at the end of the gas service inside the basement was a service shut off valve that had been pulled against the foundation wall (Exh. 10(a)).

V. DIG SAFE VIOLATIONS

DeFelice made two calls to Dig Safe requesting markouts for the water and sewer job (Exh. 11, at 20). The first call was on October 1, 2010 (Exh. 3). The second was on November 2, 2010 (Exh. 3). Neither of these Dig Safe notifications requested any mark outs in front of Danny Road (Exh. 11, at 26).

The Department found that the Excavator failed to provide proper notification to Dig Safe Systems, Inc., pursuant to G.L. c. 82, § 40A, prior to DeFelice's excavation of the area on Danny Road (Exh. 11, at 22-26, 38). The Department further found that the Excavator violated the Dig Safe laws at G.L. c. 82, § 40C by failing to take reasonable precautions to avoid damage to NSTAR underground facilities at Danny Road (Exh. 11, at 38).

VI. FINDINGS

A. The Incident

1. The Boston Water and Sewer Commission awarded DeFelice a contract to replace or rehabilitate water, drain and sewer mains on Reynold Road in Hyde Park.
2. On October 1, 2010, DeFelice notified Dig Safe. The notification did not call for any markings to be placed on Danny Road. The area delineated by the Dig Safe ticket request from DeFelice was for Reynold Road from Chesterfield Street to Como Road, from the street to the property line including intersections.
3. On November 2, 2010, DeFelice notified Dig Safe again and asked for Reynold Road to be re-marked from Como Road to Chesterfield Street.
4. The October 1, 2010, Dig Safe Ticket notes that DeFelice stated that it would excavate only on Reynold Road, between the intersections of Como Road and Chesterfield Street in Hyde Park from the street to property line including intersections.
5. On November 3, 2010, DeFelice began excavating on Danny Road in Hyde Park, Massachusetts.
6. The DeFelice excavation on Danny Road extended approximately seventeen (17) feet beyond the property line of 17 Danny Road at the intersection of Danny Road and Reynold Road.
7. While excavating on Danny Road, DeFelice struck and damaged a buried gas service supplying 17 Danny Road.
8. After damaging the gas service a DeFelice employee walked towards the house and smelled a natural gas odor.

9. The excavator operator was told of the gas odor and decided to sever the gas service with the excavator to vent the gas to the atmosphere.
10. After severing the gas service the excavator operator and the crew member walked towards the house and knocked on the door to see if anyone was inside the house.
11. As the DeFelice employees walked away, shortly thereafter the house exploded.

B. The Gas Main and Gas Service Under Danny Road

1. NSTAR installed a four (4) inch diameter steel gas main underlying the eastern side of Danny Road in 1960.
2. In 1960, NSTAR installed a one (1) inch diameter steel gas service supplying 17 Danny Road.
3. The MAOP of the gas main was 25 psig.
4. The gas service regulator and the meter for 17 Danny Road were located inside the house.

C. The Recovered Pipe

1. Three sections of the gas service pipe were recovered from the scene:
 - The first section had been connected to the gas main in Danny Road and was cut and capped by NSTAR to stop the flow of gas.
 - The second section of the gas service was not capped it was partially located and buried in the sidewalk area. When NSTAR excavated and exposed this section of the gas service, the curb valve was found to be broken in two.
 - The third section of gas had the other half of the broken curb valve and terminated in the basement of 17 Danny Road. Inside the basement the gas service had been connected to the service regulator and was broken at this point. Installed at the end of the gas service inside the basement was a service shut off valve that had been pulled against the foundation wall.

D. Dig Safe Law Violations

1. DeFelice failed to provide proper notification to Dig Safe Systems, Inc., prior to DeFelice's excavation on Danny Road.
2. DeFelice failed to take reasonable precautions to avoid damage to NSTAR underground facilities on Danny Road.


VII. CONCLUSIONS

On November 3, 2010, as DeFelice began to excavate on Danny Road, the excavator damaged the gas service supplying 17 Danny Road. After smelling gas outside the house the excavator operator severed the gas service attempting to vent it to the atmosphere. The resulting damages to the gas service, caused the gas service valve (in the grass area between the street and sidewalk supplying 17 Danny Road) to break into two pieces, the gas service pipe inside the basement was displaced from its installation position as it was pulled towards the street and the connection to the service regulator inside of 17 Danny Road was broken.

The broken gas service valve at the street line and the broken gas pipe at the service regulator inside of 17 Danny Road, were the most likely sources of the release of gas. The escaping gas accumulated inside of 17 Danny Road, and was ignited by an undetermined source inside the house.

Exhibit 1

**NSTAR Report to U.S. Department of Transportation –
Pipeline and Hazardous Materials Administration**

| | | | |
|--|--------------------------------|---|----------------------|
| NOTICE: This report is required by 49 CFR Part 101. Failure to report can result in a civil penalty not to exceed 100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$1,000,000 as provided in 49 USC 60122. | | OMB NO: 2137-0522 EXPIRATION DATE: 01/31/2013 | |
|  U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration | Report Date: 12/22/2010 | | (DOT Use Only) |
| | No. 20100111 - 15151 | | |
| | | | |
| INCIDENT REPORT - GAS DISTRIBUTION SYSTEM | | | |
| <p>A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0522. Public reporting for this collection of information is estimated to be approximately 10 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.</p> | | | |
| INSTRUCTIONS | | | |
| <p><i>Important: Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline.</i></p> | | | |
| PART A - KEY REPORT INFORMATION | | | |
| Report Type: (select all that apply) | | Original: Yes | Supplemental: |
| Report Status | | Final: | |
| Create Date | | Submitted | |
| 1. Operator's OPS-issued Operator Identification Number (OPID): | | 12/21/2010 | |
| 2. Name of Operator | | 2652 | |
| 3. Address of Operator: | | NSTAR GAS COMPANY | |
| 3a. Street Address | | One NSTAR Way | |
| 3b. City | | Westwood | |
| 3c. State | | Massachusetts | |
| 3d. Zip Code | | 02090 | |
| 4. Local time (24-hr clock) and date of the Incident: | | 11/03/2010 08:52 | |
| 5. Location of Incident: | | | |
| 5a. Street Address or location description | | 17 Danny Road | |
| 5b. City | | Hyde Park | |
| 5c. County or Parish | | Suffolk | |
| 5d. State | | Massachusetts | |
| 5e. Zip Code | | 02136 | |
| 5f. Latitude: | | 42.24113 | |
| Longitude: | | -71.13693 | |
| 6. National Response Center Report Number: | | 959886 | |
| 7. Local time (24-hr clock) and date of initial telephonic report to the National Response Center: | | 11/03/2010 15:37 | |
| 8. Incident resulted from: | | Unintentional release of gas | |
| 8. Gas released: | | Natural Gas | |
| - Other Gas Released Name: | | | |
| 10. Estimated volume of gas released - Thousand Cubic Feet (MCF): | | 4.00 | |
| 11. Were there fatalities? | | No | |
| - If Yes, specify the number in each category: | | | |
| 11a. Operator employees | | | |
| 11b. Contractor employees working for the Operator | | | |
| 11c. Non-Operator emergency responders | | | |
| 11d. Workers working on the right-of-way, but NOT associated with this Operator. | | | |
| 11e. General public | | | |
| 11f. Total fatalities (sum of above) | | | |
| 12. Were there injuries requiring inpatient hospitalization? | | No | |
| - If Yes, specify the number in each category: | | | |
| 12a. Operator employees | | | |
| 12b. Contractor employees working for the Operator | | | |
| 12c. Non-Operator emergency responders | | | |
| 12d. Workers working on the right-of-way, but NOT associated with this Operator | | | |
| 12e. General public | | | |
| 12f. Total injuries (sum of above) | | | |
| 13. Was the pipeline/facility shut down due to the incident? | | No | |
| - If No, Explain: | | Capped service line at main and the main stayed in service. | |

| | |
|--|---|
| - If Other, Describe: | |
| Approx. size: (widest opening): | |
| (length circumferentially or axially): | |
| - If Other - Describe: | Komatsu PC240LC backhoe excavator operated by a third party contractor pulled gas line causing break |
| PART D - ADDITIONAL CONSEQUENCE INFORMATION | |
| 1. Class Location of Incident: | Class 3 Location |
| 2. Estimated cost to Operator: | |
| 2a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator | \$ 0 |
| 2b. Estimated cost of gas released | \$ 240 |
| 2c. Estimated cost of Operator's property damage & repairs | \$ 0 |
| 2d. Estimated cost of Operator's emergency response | \$ 0 |
| 2e. Estimated other costs | \$ 0 |
| 2f. Estimated total costs (sum of above) | - Describe: Costs are unknown at this time. Will supplement as necessary. |
| 3. Estimated number of customers out of service: | \$ 240 |
| 3a. Commercial entities | 0 |
| 3b. Industrial entities | 0 |
| 3c. Residences | 1 |
| PART E - ADDITIONAL OPERATING INFORMATION | |
| 1. Estimated pressure at the point and time of the incident (psig): | 22.00 |
| 2. Normal operating pressure at the point and time of the incident (psig): | 22.00 |
| 3. Maximum Allowable Operating Pressure (MAOP) at the point and time of the incident (psig): | 25.00 |
| 4. Describe the pressure on the system relating to the incident: | Pressure did not exceed MAOP |
| 5. Was a Supervisory Control and Data Acquisition (SCADA) based system in place on the pipeline or facility involved in the incident? | Yes |
| - If Yes: | |
| 5a. Was it operating at the time of the incident? | Yes |
| 5b. Was it fully functional at the time of the incident? | Yes |
| 5c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations) assist with the detection of the incident? | No |
| 5d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the incident? | No |
| 6. How was the incident initially identified for the Operator? | Notification from Third Party that caused the incident |
| 6a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 6, specify the following: | |
| - If Other, Specify: | |
| 7. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the incident? | No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate) |
| - If No, the operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the operator did not investigate) | Third party contractors damage to the gas service line did not cause sufficient reduction of pressure on the system to trigger any SCADA alarms. |
| - If Yes, Specify investigation result(s) (select all that apply): | |
| - Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue | |
| - Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue | |
| - Provide an explanation for why not: | |
| - Investigation identified no control room issues | |
| - Investigation identified no controller issues | |
| - Investigation identified incorrect controller action or controller error | |
| - Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response | |
| - Investigation identified incorrect procedures | |
| - Investigation identified incorrect control room equipment operation | |
| - Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response | |
| - Investigation identified areas other than those above | |
| Describe: | |

| | |
|---|----------------------------------|
| 9. The cause(s) of corrosion selected in Question 8 is based on the following: <i>(select all that apply)</i> : | |
| - Field examination | |
| - Determined by metallurgical analysis | |
| - Other | |
| - If Other, Describe: | |
| 10. Location of corrosion <i>(select all that apply)</i> : | |
| - Low point in pipe | |
| - Elbow | |
| - Drop-out | |
| - Other | |
| - If Other, Describe: | |
| 11. Was the gas/fluid treated with corrosion inhibitor or biocides? | |
| 12. Were any liquids found in the distribution system where the incident occurred? | |
| Complete the following if any Corrosion Failure sub-cause is selected AND the "Part of system involved in Incident" (from PART C, Question 2) is Main, Service, or Service Riser. | |
| 13. Date of the most recent Leak Survey conducted | |
| 14. Has one or more pressure test been conducted since original construction at the point of the incident? | |
| - If Yes: | |
| Most recent year tested: | |
| Test pressure: | |
| G2 – Natural Force Damage – only one sub-cause can be picked from shaded left-hand column | |
| Natural Force Damage – Sub-Cause: | |
| - If Earth Movement, NOT due to Heavy Rains/Floods: | |
| 1. Specify: | |
| - If Other, Specify: | |
| - If Heavy Rains/Floods: | |
| 2. Specify: | |
| - If Other, Specify: | |
| - If Lightning: | |
| 3. Specify: | |
| - If Temperature: | |
| 4. Specify: | |
| - If Other, Specify: | |
| - Other Natural Force Damage: | |
| 5. Describe: | |
| Complete the following if any Natural Force Damage sub-cause is selected. | |
| 6. Were the natural forces causing the incident generated in conjunction with an extreme weather event? | |
| 6.a If Yes, specify <i>(select all that apply)</i> : | |
| - Hurricane | |
| - Tropical Storm | |
| - Tornado | |
| - Other | |
| - If Other, Specify: | |
| G3 – Excavation Damage – only one sub-cause can be picked from shaded left-hand column | |
| Excavation Damage – Sub-Cause: | Excavation Damage by Third Party |
| Complete the following ONLY IF the "Part of system involved in Incident" (from Part C, Question 2) is Main, Service, or Service Riser. | |
| 1. Date of the most recent Leak Survey conducted | |
| 2. Has one or more pressure test been conducted since original construction at the point of the incident? | |
| - If Yes: | |
| Most recent year tested: | |
| Test pressure: | |
| Complete the following if Excavation Damage by Third Party is selected. | |
| 3. Did the operator get prior notification of the excavation activity? | No |
| 3a. If Yes, Notification received from: <i>(select all that apply)</i> : | |
| - One-Call System | |
| - Excavator | |
| - Contractor | |
| - Landowner | |

| | |
|---|-------------------------------------|
| - If Body of Pipe: | |
| 1. Specify: | |
| - If Butt Weld: | - If Other, Describe: |
| 2. Specify: | |
| - If Fillet Weld: | - If Other, Describe: |
| 3. Specify: | |
| - If Pipe Seam: | - If Other, Describe: |
| 4. Specify: | |
| - If Mechanical Fitting: | - If Other, Describe: |
| 5. Specify the mechanical fitting involved: | |
| 6. Specify the type of mechanical fitting: | - If Other, Describe: |
| 7. Manufacturer: | - If Other, Describe: |
| 8. Year manufactured: | |
| 9. Year installed: | |
| 10. Other attributes: | |
| 11. Specify the two materials being joined: | |
| 11a. First material being joined: | |
| - Steel | |
| - Cast/Wrought Iron | |
| - Ductile Iron | |
| - Copper | |
| - Plastic | |
| - Unknown | |
| - Other | |
| 11b. If Plastic, specify: | - If Other, Specify: |
| 11c. Second material being joined: | - If Other Plastic, specify: |
| - Steel | |
| - Cast/Wrought Iron | |
| - Ductile Iron | |
| - Copper | |
| - Plastic | |
| - Unknown | |
| - Other | |
| 11d. If Plastic, specify: | - If Other, Specify: |
| 12. If used on plastic pipe, did the fitting – as designed by the manufacturer – include restraint? | - If Other Plastic, Specify: |
| 12a. If Yes, specify: | |
| - If Compression Fitting: | |
| 13. Fitting type: | |
| 14. Manufacturer: | |
| 15. Year manufactured: | |
| 16. Year installed: | |
| 17. Other attributes: | |
| 18. Specify the two materials being joined: | |
| 18a. First material being joined: | |
| - Steel | |
| - Cast/Wrought Iron | |
| - Ductile Iron | |
| - Copper | |
| - Plastic | |
| - Unknown | |
| - Other | |
| 18b. If Plastic, specify: | - If Other, specify: |
| 18c. Second material being joined: | - If Other Plastic, specify: |
| - Steel | |
| - Cast/Wrought Iron | |

| | |
|--|-----------------------------|
| - If Other, Specify: | |
| - If Non-threaded Connection Failure: | |
| 3. Specify: | |
| - If Other, Specify: | |
| - If Valve: | |
| 4. Specify: | |
| - If Other, Specify: | |
| 4a. Valve type: | |
| 4b. Manufactured by: | |
| 4c. Year manufactured: | |
| - If Other Equipment Failure: | |
| 5. Describe: | |
| G7 - Incorrect Operation - only one sub-cause can be selected from the shaded left-hand column | |
| Incorrect Operation Sub-Cause: | |
| - If "Other Incorrect Operation: | |
| 1. Describe: | |
| Complete the following if any Incorrect Operation sub-cause is selected. | |
| 2. Was this incident related to: (select all that apply) | |
| - Inadequate procedure | |
| - No procedure established | |
| - Failure to follow procedure | |
| - Other | |
| - If Other, Describe: | |
| 3. What category type was the activity that caused the incident: | |
| 4. Was the task(s) that led to the incident identified as a covered task in your Operator Qualification Program? | |
| 4a. If Yes, were the individuals performing the task(s) qualified for the task(s)? | |
| G8 - Other Incident Cause - only one sub-cause can be selected from the shaded left-hand column | |
| Other Incident Cause - Sub-Cause: | |
| - If Miscellaneous: | |
| 1. Describe: | |
| - If Unknown: | |
| 2. Specify: | |
| PART H - NARRATIVE DESCRIPTION OF THE INCIDENT | |
| <p>On November 3, 2010, a third party contractor was installing new water mains in the public way in Hyde Park, Massachusetts. While excavating in the public way, the contractor struck and pulled up a 1" IP steel gas service to 17 Danny Road, Hyde Park causing an unintentional release of natural gas into the home located at 17 Danny Road, Hyde Park and resulting explosion. The 1" IP steel gas service had been installed with the cover of 36 inches. The contractor had failed to request a mark-out of underground facilities in Danny Road as required by Massachusetts Dig Safe laws and regulations. As a result of the explosion and as a precaution, emergency personnel at the scene evacuated several adjacent residences; the number of general public evacuated is not known.</p> | |
| File Full Name | |
| | |
| PART I - PREPARER AND AUTHORIZED SIGNATURE | |
| Preparer's Name | Kevin Kelley |
| Preparer's Title | Manager - Gas Distribution |
| Preparer's Telephone Number | (339) 987-8222 |
| Preparer's E-mail Address | kevin.kelley@nstar.com |
| Preparer's Facsimile Number | (617) 369-5496 |
| Authorized Signature | |
| Authorized Signature's Name | William McCabe |
| Authorized Signature's Title | Director - Gas Distribution |
| Authorized Signature Telephone Number | (608) 305-6950 |
| Authorized Signature's Email Address | william.mccabe@nstar.com |
| Date | 12/22/2010 |

Exhibit 2

**Boston Fire Department Investigative Report of
Incident at 17 Danny Road**

NARRATIVE STATUS
FIRE INVESTIGATION UNIT

INCIDENT: 10/59645 DATE: 11/03/2010 ADDRESS: 17 Danny Road

On Wednesday morning November 3, 2010 at 0859 hours, a second alarm was struck for fire box 384 in District 12 for an explosion. The weather at the time of the fire was clear and cool with temperatures about 40 degrees. The area was illuminated by daylight at the time of the incident.

At roughly 0925 hours, the K-6 Unit consisting of Lieutenant William McCarthy, Inspectors Patricia Donovan, Stephen Kennedy and the K-7 Unit with Inspector William Noonan arrived at Danny and Reynold Roads and reported to Acting Deputy Fire Chief Bartholomew Shea at the intersection opposite the building that was leveled to the ground due to an explosion.

Boston Police Lieutenant Detective Arthur Torigian and Detective James Freeman were notified of the fire by Fire Alarm and they responded and met with members of K-6 and K-7.

The "A" side of the building was considered 17 Reynold Road and Danny Road was the "D" side of the building. The building materials and personnel belongings were scattered all around what once was a single level, ranch-styled, single family house that was about 35 feet wide by 27 feet deep. The building was supplied with electrical power on the "D" side by an overhead drop and appeared to be a 100 ampere 120/240 volt single phase service.

On the "D" side of the building a Komatsu PC 240 LC excavator was in front of 6 foot wide trench that was up to 8 feet deep by roughly 39 long. According to the operator, Mr. George Tabicas of 1887 Yellow Hill Road in Westport, MA. 02790, he has been employed for about 20 years with the Defelice Corporation of 386 Broadway Road in Dracut, MA. (Office 978-452-6967) who has been contracted by the Boston Water and Sewer Commission to replace water mains in the area.

Mr. Tabicas said that the Dig Safe Organization was notified of the pending excavation and their crew responded and marked the locations of piping on the street service. Mr. Tabicas and his crew discovered another pipe on Tuesday morning November 2, 2010 in the street and contacted Dig Safe to review their survey. On Wednesday morning, the Defelice crew resumed the excavation when Mr. Tabicas caught onto and pulled with the excavator a 1 inch steel gas conduit. Mr. Tabicas and Mr. Manny Medeiros went to the front door of 17 Reynold Road and rang the door bell to check on the house when they heard hissing. As they were returning to the remainder of the crew, the building blew up. Mr. Tabicas said that

maybe 10 to 15 minutes elapsed between when the conduit was pulled and the explosion.

Mr. Tabicas' Hoisting License is HE 060679 and it expires 04/30/2012.

Representatives from the Commonwealth of Massachusetts Department of Public Utilities Mr. Jorge Santi, Ms. Angela Motley and Mr. Robert Hayden arrived at the scene to conduct an investigation.

The electric meter found on the site at the "A-D" corner was # 02425294 and the gas meter found in the building was # 02 18976172. The gas meter and a portion of steel piping was removed by members of the Boston Fire Department, Ladder 6, turned over to Mr. Santi and taken for safe keeping by N-Star Corporation in a secure location. This is a common practice in this situation according to Mr. Santi. The threads on the regulator on the lower portion of pipe appeared to break midway on the coupling.

A representative from OSHA arrived at the scene to investigate the digging practice of the Defelice Corporation.

The Squad spoke to the owner of the building, Mr. Michael Burns and he said that he was in work when he was notified of the incident. Mr. Burns said that he uses the natural gas for his furnace, stove and water heater. His clothes dryer operates by electrical power.

Boston Inspectional Services was represented by Building Inspector Brian Moxley, Electrical Inspector Richard Wakem, Plumbing and Gas Inspector Richard McMillan and Housing Inspector Angel Nazario to conduct assessment of the affected buildings in the area by the explosion.

The cause of the fire/explosion was the main gas pipe in the basement being pulled from the interior gas piping at the regulator meter. The natural gas pressure from the street to the regulator meter was 25 lbs in and the in house pressure to the gas appliances is less than a 1/4 lb/in.

The source of ignition could not be determined at this time, due to the damage to the structure.

The building was turned over to Paul Mahoney who is representing the Quincy Mutual Insurance Company.

Boston Police were providing security overnight until 08:00 on November 4, 2010. The total estimated damage was \$1,000,000.00. K-7 and Lieutenant McCarthy took photos.

Respectfully submitted,

Lieutenant William McCarthy CFEI
Fire Investigation Unit/Arson Squad
WMcC/db
Danny rd 17

BOSTON FIRE DEPARTMENT
INVESTIGATORS REPORT
BARS I

CHANGE: _____ DATE: 11.3.10 PAGE ____ OF ____

BOX: 384

INC.#: 100/5946.5 EXP: _____ DATE: 11.3.10 TIME: 08:46 GROUP: 7/

LOCATION: 17 ^{Danny} Reynolds Road DIST: 12 SECTION: _____

WARD: 18 PREC: 20 PARCEL: _____ SUB: _____ ZIP: 02136

INC TYPE: 111

FACTORS CONTRIBUTING TO IGNITION Leak or Break (23)

CAUSE OF IGNITION UNINTENTIONAL (0 1 2 3 4 5 U)

ESTIMATED DAMAGE: \$1000,000.00 GRID: _____

OCCUPANT: Michael Burns HM PHN: _____

OWNER: Same as above HM PHN: _____

OWNER ADD: 17 Reynolds Road WK PHN: _____

FIRST ARR ENG: 49 Serexant LAD: 16 Duffy CHF: P. Keeley

PROP STATUS: 2 PROP SECUR: Y FORCE ENTRY: N SABOTAGE: N

FLOOR: — ROOM OF ORIGIN: House Collapse () ODOR PRES: _____

ACC USED: N METHOD FIRE INIT: _____

SUSPECT NAME: _____ S.S.#: _____

DATE OF BIRTH: _____ SEX: _____ RACE: _____ MOTIVE: _____

ADD: _____ PHONE: _____

TOTAL INS: _____ INS CO: _____

MOB PRP TYPE: _____ YR: _____ MAKE: _____ MODEL: _____

VIN #: _____ REG: _____ STATE: _____ COLOR: _____

INSPECTORS & ID #S: _____ DATE INVEST: 11.15.10

Lt. Wm. McCarthy 085 P. Donovan 121

S. Kennedy 103 _____

PHOTOGRAPHER & ID#: Wm. Noonan 011

B.P.D. Lt. Det. A. Torigian 065
1. E. 2. 1. 122

Exhibit 3

Testimonies Submitted in, DeFelice,
D.P.U. 11-DS-1, D.P.U. 11-DS-2:

- (a) George DeFelice;
- (b) George Tabicas; and
- (c) Manny Mederios

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES

| | | |
|----------------|---|----------------|
| _____ |) | |
| DEFELICE CORP. |) | D.P.U. 11-DS-1 |
| (Como Road) |) | |
| _____ |) | |

| | | |
|----------------|---|----------------|
| _____ |) | |
| DEFELICE CORP. |) | D.P.U. 11-DS-2 |
| (Danny Road) |) | |
| _____ |) | |

PREFILED TESTIMONY OF GEORGE DeFELICE

I, George DeFelice, hereby submit the following prefiled testimony in connection
with the above-captioned matters.

1 My name is George DeFelice and I reside in Dracut Massachusetts. I am the
2 President of DeFleice Corporation ("DeFelice") with a primary place of business at 386
3 Boradway, Dracut, Massachusetts. I have worked in the construction industry for 31
4 years. For the past 26 years, I have been the President of DeFelice Corporation, a general
5 contractor that specializes in the installation of utilities such as water and sewer lines and
6 appurtenances.

7 The Boston Water and Sewer Commission ("BWSC") awarded DeFelice Contract
8 # 09-308-005 (the "Contract"). The Contract includes the construction of relay of water
9 mains and replacement and rehabilitation of drain and sewer pipes in Hyde Park,
10 Roslindale and West Roxbury, Massachusetts (the "Project"). It is my understanding that
11 prior to the commencement of the Project, the utilities, including NSTAR, were provided
12 with a set of project plans.

13 Part of the Project work was performed in Readville, from the intersection of
14 Como Road and Reynold Road, along Reynold Road through and including the
15 intersection with Danny Road, through and including the intersection of Reynold Road
16 and Chesterfield Street. (*See Exhibit 1, page 7 of the project plans.*) Prior to the
17 commencement of work in that area, I delineated the general scope of the excavation by
18 using white paint consistent with standard and acceptable practices. With respect to the
19 area at issue, I marked the location of the trench for the water main along Reynold Road.
20 At the intersection of Reynold Road and Danny Road, I painted arrows in a easterly and
21 westerly direction, in both directions of Danny Road, and next to those arrows, painted a
22 notation "50" indicating the general scope of the excavation could include 50 feet
23 perpendicular to the water main trench.

1 I notified Robert Savage that I had pre-marked the area of excavation. On
2 October 1, 2010, it is my understanding that Robert Savage, provided Dig Safe with
3 notice of an excavation by calling Dig Safe. A copy of the recording of the Dig Safe
4 telephone call is included at Exhibit 2 on the compact disc of exhibits transmitted with
5 this testimony. A copy of the Dig Safe ticket is attached at Exhibit 3. In response to Mr.
6 Savage's call to Dig Safe, it is my understanding the utility companies marked the
7 location of utilities in the excavation area. A photograph of one of the gas main marks on
8 Danny Road is attached at Exhibit 4, and a photograph of the mark indicating the location
9 of the lateral gas service for 16 Danny Road is attached at Exhibit 5.

10 DeFelice commenced excavation activities on the project site on approximately
11 October 22, 2010. According to my daily conversation with DeFelice project personnel,
12 at certain times during the course of the project, DeFelice encountered gas lines which
13 were not marked or mismarked on the pavement. For example, while working at the
14 southerly side of the intersection of Danny and Reynold Roads, DeFelice encountered a
15 two inch main, four inch main, and valve box, where only a two inch main was marked.

16 On or about Tuesday November 2, 2010, Mr. Tabicas and his crew were working
17 in the vicinity of the Reynold Road and Como Road intersection. Once again, Mr.
18 Tabicas encountered a gas main which was not marked in the pavement. Mr. Tabicas
19 called Mr. Savage and asked him to request a gas line remarking from Dig Safe. Mr.
20 Savage in fact called Dig Safe, a recording of which is included as the second recording
21 on Exhibit 2 on the compact disc of exhibits transmitted with this statement. A copy of
22 the November 2, 2010 Dig Safe ticket is attached at Exhibit 6.

1 In my opinion, based upon my over a quarter-century of experience, DeFelice
2 complied with its obligations under Mass. Gen. Laws, c. 82, § 40 *et seq.*, and 220 CMR
3 99.00. I properly delineated the general scope of the excavation. It is clear from
4 NSTAR's actions of marking the gas main which proceeds from the intersection of
5 Danny Road and Reynold Road down Danny Road, and by marking the gas service for
6 16 Danny Road, (approximately forty-six feet from the intersection), that NSTAR
7 recognized what was requested of it to mark and required to be mark. It is undisputed
8 that the service to 17 Danny Road which was encountered by DeFelice was not marked.
9 DeFelice reasonably relied upon NSTAR's markings which were, in fact, not accurate.

10 Respectfully submitted,

11 George DeFelice

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES

| | | |
|----------------|---|----------------|
| _____ |) | |
| DEFELICE CORP. |) | D.P.U. 11-DS-1 |
| (Como Road) |) | |
| _____ |) | |

| | | |
|----------------|---|----------------|
| _____ |) | |
| DEFELICE CORP. |) | D.P.U. 11-DS-2 |
| (Danny Road) |) | |
| _____ |) | |

PREFILED TESTIMONY OF MANNY MEDEIROS

I, Manny Medeiros, hereby submit the following prefiled testimony in connection
with the above-captioned matters.

1 My name is Manny Medeiros and I reside in Swansea, Massachusetts. At all
2 times relecant to these proceedings I am an operator/pipe layer for DeFleice Corporation
3 ("DeFelice") with a primary place of business at 386 Boradway, Dracut, Massachusetts.

4 The Boston Water and Sewer Commission ("BWSC") awarded DeFelice Contract
5 # 09-308-005 (the "Contract"). The Contract includes the construction of relay of water
6 mains and replacement and rehabilitation of drain and sewer pipes in Hyde Park,
7 Roslindale and West Roxbury, Massachusetts (the "Project").

8 The DeFelice crew I worked on commenced excavation activities on the project
9 site on approximately October 22, 2010. At certain times during the course of the
10 project, I encountered gas lines which were not marked or mismarked on the pavement.
11 For example, while working at the southerly side of the intersection of Danny and
12 Reynold Roads, I encountered a two inch main, four inch main, and valve box, where
13 only a two inch main was marked.

14 On or about Monday, November 1, 2010, while hand-digging in the vicinity of 5
15 Reynold Road and 7 Reynold Road, our crew encountered a one inch plastic gas service
16 line. The gas line was nicked by DeFelice's shovel and NSTAR was contact.
17 Approximately four to five NSTAR representatives were on site at the time and George
18 Tabicas personally requested the NSTAR representatives inspect the nick in the one inch
19 plastic gas service line. The NSTAR representatives proceeded to repair the pipe. At
20 that time, Mr. Tabicas advised the NSTAR representatives that DeFelice would be
21 proceeding with work in the Reynold Road and Danny Road intersection later in the
22 week and requested that NSTAR confirm the location of the gas lines in that area. I

1 observed the NSTAR representatives with line detection and marking equipment working
2 in both direction of Danny Road on or about Monday, November 1, 2010.

3 On or about Tuesday November 2, 2010, our crew was working in the vicinity of
4 the Reynold Road and Como Road intersection. Once again, we encountered a gas main
5 which was not marked in the pavement. It is my understanding that Mr. Tabicas called
6 Mr. Savage and asked him to request a gas line remarking from Dig Safe.

7 The next day, Wednesday, November 3, 2010, our crew commenced an
8 excavation at the intersection of Reynold Road and Danny Road for a connection to a
9 water main drain pipe. Mr. Tabicas positioned the DeFelice excavator on the easterly
10 side of the intersection facing west. To his left was NSTAR's markings for the gas main
11 on Danny Street (and the marking for the lateral which provides service to 16 Danny
12 Street. There were no gas line marks on the pavement or elsewhere in the vicinity where
13 he advanced the excavation (approximately 5-12 feet from the corner of Danny Road). At
14 the site that day for DeFelice was me, George Tabicas, Sal Pestana, and John Dutra.
15 More than twenty-four hours after Dig Safe had been contacted, while advancing the
16 excavation, Mr. Tabius encountered a 1-inch steel pipe that was located approximately 12
17 feet to the east of the intersection of Danny and Reynold Roads. The steel pipe had been
18 kinked. There were no marks on the asphalt indentifying the location of the gas service
19 line. Mr. Tabicas hand dug around the steel pipe (expecting to find a plastic service line)
20 while I walked toward the house at 17 Danny Road. As I approached the house I smelled
21 a natural gas odor. I immediately notified Mr. Tabicas of the gas odor. Mr. Tabicas
22 immediately severed the gas service line with the excavator to vent the service line to the
23 atmosphere. I then walked back to the door of 17 Danny Street and knocked on the door

1 to see whether anyone was inside the house. No one answered the door. While Mr.
2 Tabicas and I walked away from the house down the driveway the house exploded. The
3 authorities were notified immediately thereafter.

4 Respectfully submitted,

Manny Medeiros

5

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES

| | | |
|----------------|---|----------------|
| DEFELICE CORP. |) | |
| (Como Road) |) | D.P.U. 11-DS-1 |
| |) | |

| | | |
|----------------|---|----------------|
| DEFELICE CORP. |) | |
| (Danny Road) |) | D.P.U. 11-DS-2 |
| |) | |

AFFIDAVIT OF GEORGE TABICAS

George Tabicas of Fall River, Massachusetts does hereby depose and say as follows:

1. I am George Tabicas, Foreman/Operator of DeFelice Corporation with a principal place of business at 386 Broadway, Dracut, Massachusetts.

I hereby certify that the enclosed testimony and attachments, on behalf of DeFelice Corp. are true and accurate to the best of my knowledge and belief.

Signed under the penalties of perjury this 20th day of January 2012.

George Tabicas

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES

| | | |
|----------------|---|----------------|
| _____ |) | |
| DEFELICE CORP. |) | D.P.U. 11-DS-1 |
| (Como Road) |) | |
| _____ |) | |

| | | |
|----------------|---|----------------|
| _____ |) | |
| DEFELICE CORP. |) | D.P.U. 11-DS-2 |
| (Danny Road) |) | |
| _____ |) | |

PREFILED TESTIMONY OF GEORGE TABICAS

I, George Tabicas, hereby submit the following prefiled testimony in connection
with the above-captioned matters.

1 My name is George Tabicas and I reside in Westport, Massachusetts. At all times
2 relecant to these proceedings I am an operator and foreman at DeFelice Corporation
3 ("DeFelice") with a primary place of business at 386 Boradway, Dracut, Massachusetts.
4 I have been employed by DeFelice Corporation for over ten (10) years.

5 The Boston Water and Sewer Commission ("BWSC") awarded DeFelice Contract
6 # 09-308-005 (the "Contract"). The Contract includes the construction of relay of water
7 mains and replacement and rehabilitation of drain and sewer pipes in Hyde Park,
8 Roslindale and West Roxbury, Massachusetts (the "Project"). It is my understanding that
9 prior to the commencement of the Project, the utilities, including NSTAR, were provided
10 with a set of project plans.

11 Part of the Project work was performed in Readville, from the intersection of
12 Como Road and Reynold Road, along Reynold Road through and including the
13 intersection with Danny Road, through and including the intersection of Reynold Road
14 and Chesterfield Street. Prior to the commencement of work in that area, George
15 DeFelice delineated the general scope of the excavation by using white paint consistent
16 with standard and acceptable practices. I personally observed those marks.

17 It is my understanding that on October 1, 2010, Robert Savage, provided Dig Safe
18 with notice of an excavation by calling Dig Safe. In response to Mr. Savage's call to Dig
19 Safe, the utility companies marked the location of utilities in the excavation area.

20 Notably, NSTAR marked a two inch gas main generally running in an easterly
21 direction from the intersection of Reynold Road and Danny Road. NSTAR marked the
22 main in the intersection, and consistent with Mr. DeFelice's premarking, marked the gas
23 line running parallel to the southerly side of Danny Road. The yellow markings of the

1 two inch gas main running from the middle of Reynold Road in an easterly direction
2 down Danny Road were entirely consistent in terms of color and age. NSTAR placed at
3 least two marks on Danny Road indicating the location of the two inch main and marked
4 the service lateral for 16 Danny Road, approximately forty-six feet from the intersection
5 with Reynold Road. A photograph of one of the gas main marks on Danny Road is
6 attached to George DeFelice's prefiled testimony ("DeFelice Testimony") at Exhibit 4,
7 and a photograph of the mark indicating the location of the lateral gas service for 16
8 Danny Road is attached to the DeFelice Testimony Exhibit 5.

9 DeFelice commenced excavation activities on the project site on approximately
10 October 22, 2010. At certain times during the course of the project, I encountered gas
11 lines which were not marked or mismarked on the pavement. For example, while
12 working at the southerly side of the intersection of Danny and Reynold Roads, I
13 encountered a two inch main, four inch main, and valve box, where only a two inch main
14 was marked.

15 On or about Monday, November 1, 2010, while my crew was hand-digging in the
16 vicinity of 5 Reynold Road and 7 Reynold Road, I encountered a one inch plastic gas
17 service line. The gas line was nicked by DeFelice's shovel and NSTAR was contact.
18 Approximately four to five NSTAR representatives were on site at the time and I
19 personally requested the NSTAR representatives inspect the nick in the one inch plastic
20 gas service line. The NSTAR representatives proceeded to repair the pipe. At that time,
21 I advised the NSTAR representatives that I would be proceeding with work in the
22 Reynold Road and Danny Road intersection later in the week and requested that NSTAR
23 confirm the location of the gas lines in that area. The NSTAR representative agreed he

1 would provide additional markings for the underground gas facilities in the Danny Road
2 and Reynold Road area, telling me that "my records suck" for this area. I conveyed that I
3 had encountered both a two inch and a four inch line and a valve box near the southerly
4 side of the Danny and Reynold intersection where only the two inch line was marked.
5 After the NSTAR representatives completed the one inch plastic repair, I observed the
6 NSTAR representatives with line detection and marking equipment working in both
7 direction of Danny Road on or about Monday, November 1, 2010.

8 On or about Tuesday November 2, 2010, I and my crew were working in the
9 vicinity of the Reynold Road and Como Road intersection. Once again, I encountered a
10 gas main which was not marked in the pavement. I called Mr. Savage and asked him to
11 request a gas line remarking from Dig Safe. It is my understanding that Mr. Savage in
12 fact called Dig Safe, a recording of which is included at Exhibit 2 on the compact disc of
13 exhibits transmitted with the DeFelice Testimony. Mr. Savage specifically requested that
14 the only utility that needed to remark its facilities was the gas company and he
15 specifically confirmed that "all intersections" are included in his request for remarking.

16 The next day, Wednesday, November 3, 2010, my crew commenced an
17 excavation at the intersection of Reynold Road and Danny Road for a connection to a
18 water main drain pipe. I positioned the DeFelice excavator on the easterly side of the
19 intersection facing west. To my left, I observed NSTAR's markings for the gas main on
20 Danny Street (Exhibit 4) and the marking for the lateral which provides service to 16
21 Danny Street (Exhibit 5). There were no gas line marks on the pavement or elsewhere in
22 the vicinity where I advanced the excavation (approximately 5-12 feet from the corner of
23 Danny Road). At the site that day for DeFelice was me, Manny Medeiros, Sal Pestana,

1 and John Dutra. More than twenty-four hours after Dig Safe had been contacted, while
2 advancing the excavation, I encountered a 1-inch steel pipe that was located
3 approximately 12 feet to the east of the intersection of Danny and Reynold Roads. The
4 steel pipe had been kinked. There were no marks on the asphalt indentifying the location
5 of the gas service line. I hand dug around the steel pipe (expecting to find a plastic
6 service line) while Mr. Medeiros walked toward the house at 17 Danny Road. As Mr.
7 Medeiros approached the house he smelled a natural gas odor. Mr. Medeiros
8 immediately notified me of the gas odor. I immediately severed the gas service line with
9 the excavator to vent the service line to the atmosphere. I also contacted Mr. Savage who
10 in turned contacted NSTAR regarding the leak in the gas line. Mr. Medeiros and I then
11 walked back to the door of 17 Danny Street and knocked on the door to see whether
12 anyone was inside the house. No one answered the door. While Mr. Medeiros and I
13 walked away from the house down the driveway the house exploded. The authorities
14 were notified immediately thereafter.

15 Respectfully submitted,

16 George Tabicas

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES

DEFELICE CORP.
(Como Road)

)
) D.P.U. 11-DS-1
)
)

DEFELICE CORP.
(Danny Road)

)
) D.P.U. 11-DS-2
)
)

AFFIDAVIT OF MANNY MEDEIROS

Manny Medeiros of Massachusetts does hereby depose and say as follows:

1. I am Manny Medeiros, Operator/Pipelayer of DeFelice Corporation with a principal place of business at 386 Broadway, Dracut, Massachusetts.

I hereby certify that the enclosed testimony and attachments, on behalf of DeFelice Corp. are true and accurate to the best of my knowledge and belief.

Signed under the penalties of perjury this 20th day of January 2012.

Manny Medeiros

Exhibit 4

Water and Sewer Plan, Boston Water and Sewer Commission



RELAY EXISTING WATER MAIN
WITH 8-INCH D.I.C.L. WATER PIPE

REHABILITATE EXISTING 15-INCH VC
SANITARY SEWER WITH A STRUCTURAL
LINER

RELAY EXISTING 15-INCH DRAIN PIPE
WITH 16-INCH DI PIPE

RELAY EXISTING 15-INCH SANITARY SEWER
PIPE WITH 16-INCH PVC PIPE

RELAY EXISTING 15-INCH DRAIN PIPE
WITH 16-INCH DI PIPE

PLAN

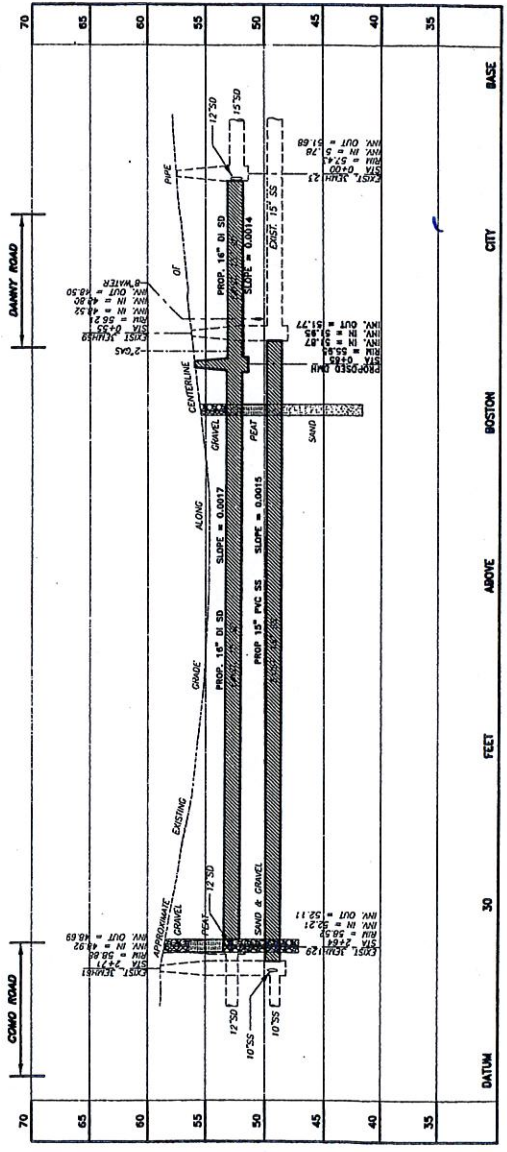


Exhibit 5

Incident Photographs:

- 5(a) 17 Danny Road, Hyde Park (11-3-10);
- 5(b) Broken Gas Service - House Side, supplying
17 Danny Road (11-3-10);
- 5(c) Cut and Capped Gas Service - Street Side, supplying
17 Danny Road (11-3-10); and
- 5(d) DeFelice Excavation on Danny Road (11-3-10)



Exhibit 5(a) - 17 Danny Road, Hyde Park (11-3-10)



Exhibit 5(b) Broken Gas Service - House Side, supplying
17 Danny Road (11-3-10)



Exhibit 5(c) Cut and Capped Gas Service - Street Side, supplying
17 Danny Road (11-3-10)



Exhibit 5(d) DeFelice Excavation on 17 Danny Road (11-3-10)

Exhibit 6

NSTAR Plan of Gas Piping on Danny Road and Reynolds Road

Information Request: IR-PL-1-6

January 10, 2011

17 Danny Road, Hyde Park

Source: Bob Buffone

IR PL 1-6: Provide a detailed map and description of the gas main underlying Reynold Road (from the Como Road and Chesterfield Street intersections) including but not limited to material, installation date and length

Response:

Please see Attachment IR-PL-1-6.

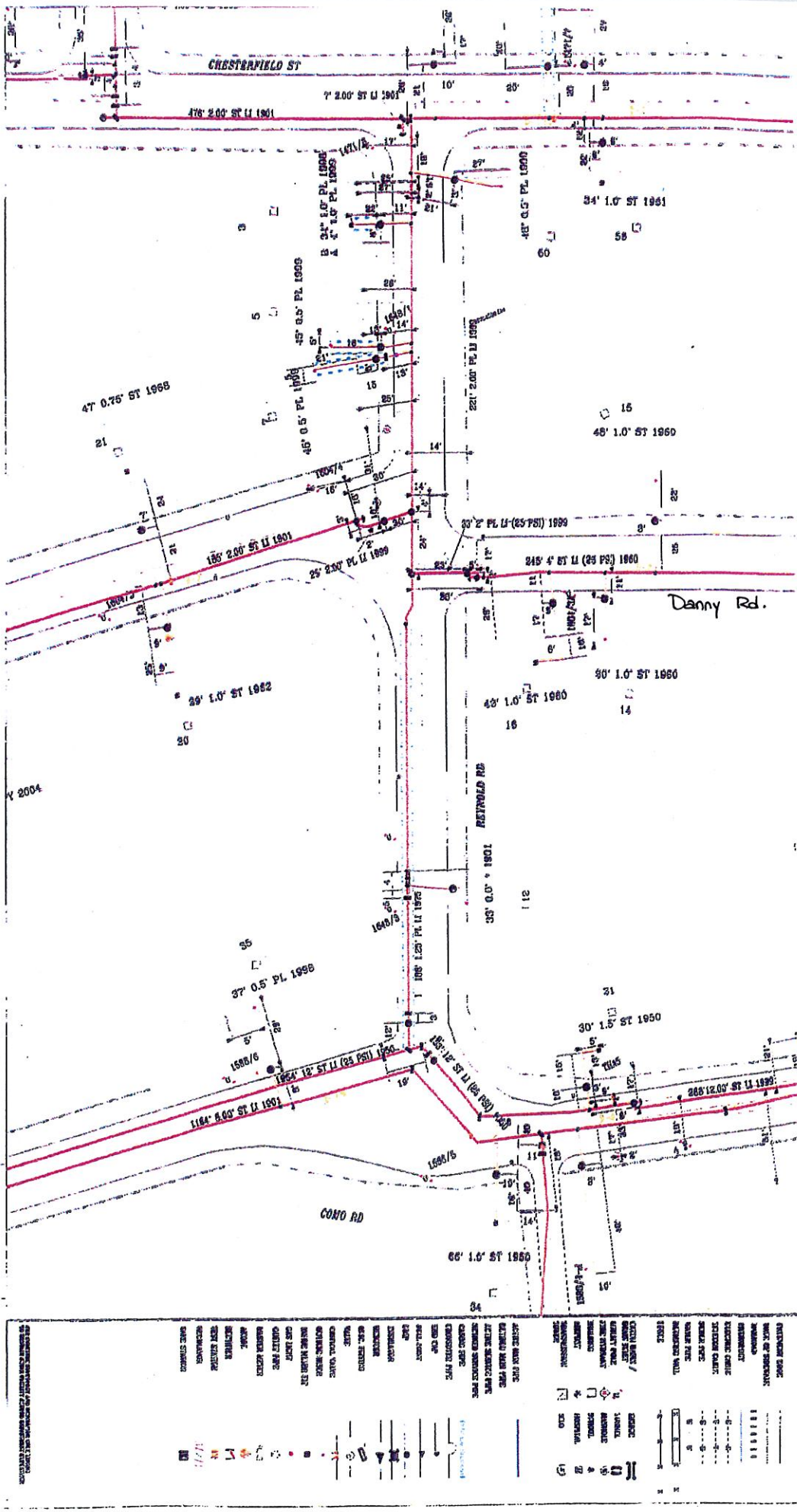


Exhibit 7

NSTAR Gas Service Card for 17 Danny Road


Information Request: IR-PL-1-4
January 10, 2011
17 Danny Road, Hyde Park
Source: Bob Buffone

IR PL 1-4: Provide a service card record for the gas service supplying 17 Danny Road, the information should include but not limited to, installation date, MAOP, and operating pressure at the time of the Incident.

Response:

Attachment IR-PL-1-4 is the service card record for the gas service supplying 17 Danny Road. The MAOP of the system is 25 psig and the operating pressure at the time of the incident was 22 psig.

SERVICE CARD

| | | |
|---|--------------------------|-----------------------|
| No. 17 DANNY R.D. | St. | Permit No. HYDOL PARK |
| Name | Date | 8/24/1960 |
| Service-Size 1" New | Renewed | Drips to |
| Length 44 Ft. 9 Ins. | M. to L.L. 27' | L.L. to end 17'-8" |
| #142 ROCKWELL COOK | | |
| HIGH HEAD EXT. | | |
| INTERMEDIATE PRESSURE | | |
|  | | |
| HY01881 | | |
| Size of Main 4" (W) | Condition 1/4" TAP | |
| " 3'-0" | Soil 1 1/4" MUELLER TUBE | |
| Distance from Street Line | Side | |
| " " Curb " | Recorded by | |
| SEE FIELD BOOK #60-6 PAGE #12 | | |

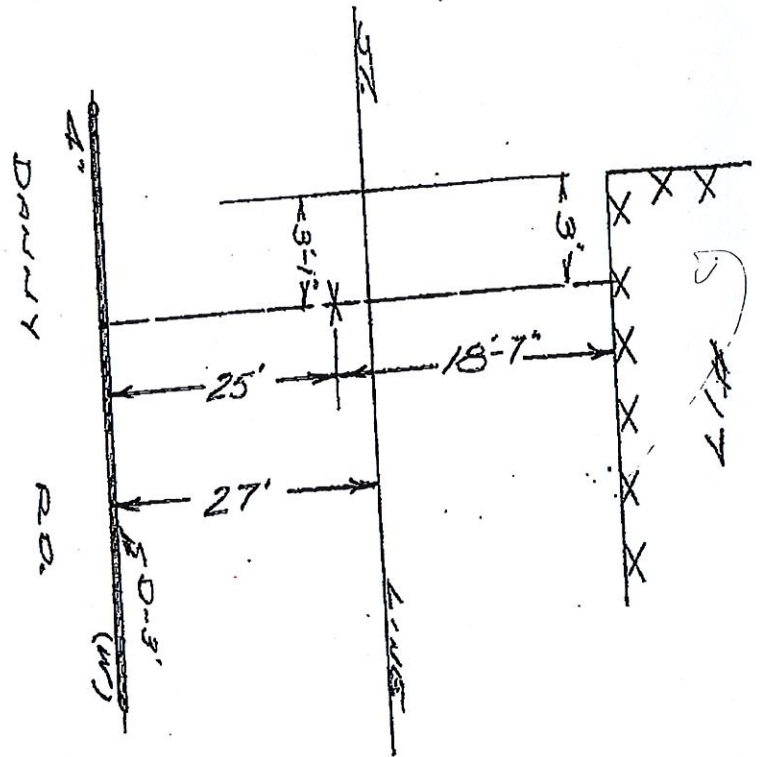


Exhibit 8

Statements from NSTAR Gas Employees

Information Request: IR-PL-1-3
January 10, 2011
17 Danny Road, Hyde Park
Source: Kevin Kelley/Gerry Griffin

IR PL 1-3: Provide statements from NSTAR personnel identified in Information Request IR-PL-1-2 who responded to the Incident.

Response:

Please see Attachment IR-PL 1-3.

To: Kevin Kelley
From: Matthew Knowles
Date: 11/3/2010
Subject: Incident @ 17 Reynold Road Hyde Park

On Wednesday November 3, 2010 at 8:52AM at 843 Hyde Park Ave. Hyde Park. Jack Jackson (Service Supervisor) said there was a house explosion on Danny Road in Hyde Park. Immediately I informed Bill Bowler and Kevin Kelley. We left the building immediately. I called Vincent Foxx (A Distribution Tech) at 8:54AM instructing him to tell the Distribution crew to meet Bill Bowler and I at Danny Road in Hyde Park, and that there was a house explosion. Bill Bowler and I arrived on site at Danny Road near Reynold Road at approximately 9:00AM. The Boston Police and Boston Fire Dept. were on Site along with the contractor Defelice Corp.. The Fire Dept. were working on fighting a house fire located at 17 Reynold Road which was collapsed and burning. Bill Bowler and I could see that a gas service on Danny Road near Reynold Road was severed and sticking up out of the ground, and had a broom stick handle jammed into the end. The gas service was still leaking, but the broom handle had slowed it down. It was a 1" steel gas service that fed 17 Reynold Road off of Danny Road. Bill Bowler and I discussed a plan to cut the leaking gas service off and install an expansion plug to completely stop the gas leak. During this time I noticed a Fire Fighter with a gate stick on the valve to 16 Reynold Road (which the gas service is fed off the gas main on Danny Road) and asked him what he was doing, he replied he was trying to shut off the valve

but was unsuccessful. I instructed him not to turn the valve. Bill Bowler and I got into position in the excavation and I informed the Fire Fighters that were standing in the intersection of Reynold Road @ Danny Road that we were going to cut off the gas service to 17 Reynold Road and that there would be a quick release of gas during the process. The Fireman informed the other personnel in the intersection. Bill Bowler and I performed the cut and cap to the 1" steel pipe and used an expansion plug to stop the leak. A 1" Style 90 line cap was installed with the help of Steve Davis. This was complete at 9:19am. Bill Bowler used a gas meter and took a reading in the bank of the excavation towards the gas main. Bill Bowler and I detected 6% gas and it dropped to 0% within 5 seconds. The Fire Dept. asked Bill Bowler and I if the gas leak was stopped. I informed the Fire Dept. that the hit gas service was secure. At 9:45 AM Kevin Kelley informed Bill Bowler and I to get all of the Gas Distribution Techs together for a field meeting. This meeting was held in the yard of 16 Reynold Road. Kevin instructed me to make contact with the Fire Chief, and, to take notes and keep record of the times. I met with Fire Chief Bart Shea approximately 9:50AM. I informed Fire Chief Shea that NSTAR was in the process of checking the area for any gas leaks. I asked Fire Chief Shea what we (NSTAR) could do to assist. Fire Chief Shea said he would like any houses marked with a white X on the front of the house for the gas to be shut off. I then met with Jack Jackson and passed on that information. Jack Jackson informed me his men were already in the process of isolating gas services. Bill Bowler, Kevin Kelley and I discussed the possibility of having to isolate the gas main on Danny Road from Readville Street to Reynold Road. And that to make sure the valves were visible and clear. Bill Bowler and I instructed Mike Gavin and Bob Falvey to proceed to the

intersection of Readville @ Danny Road and to locate and make sure that the valve box was accessible and clear to be able to get a gate wrench on the valve if needed. Bill Bowler, Kevin Kelley and I then discussed the other main valve located at Danny Road @ Reynold Road. At 10:15AM a second field meeting was held which Kevin Kelley conducted. At 12:41 PM I called Bill Polin from Engineering to run an analysis on the gas system and if needed could Distribution close the main valves to isolate Danny Rd. from Readville St. to Reynold Road without impacting the system. Bill Polin informed me at 12:44PM that the two valves could be closed with no system impact. I immediately told Bill Bowler and Kevin Kelley this information. At approximately 2:00PM there was a third field meeting and Kevin Kelley informed Bill Bowler and I and we met with Dave Matthews from the Claims Dept. and instructed that all the service line pipe and associated equipment would be tagged and brought to an evidence locker located in Westwood. At 2:17 PM Mike Gavin and Steve Davis cut and tagged the 1" dead service pipe going towards 17 Reynold Road. At 2:30PM the 2" plastic main valve was exposed at Danny Road @ Reynold Road. At 2:45 PM I measured off Reynold Road from the property lines from Chesterfield St. to Como Road. The measurement was approximately 382 feet. At 2:45PM I called Mary Jean Fostin for an emergency permit for the City Of Boston to excavate on Danny Road. At 3:09PM Joe Clougherty and Vincent Foxx started working on threnching from hit line to gas main on Danny Road. At 3:30PM the 1" service was tagged and transferred to the Distribution Truck 94004. Dave Matthews assisted with the date and times on the tags that were attached to the service pipe and associated equipment.



Attorney-client privilege / work product

To: Bill McCabe
From: Kevin J. Kelley
Date: November 5, 2010
Subject: Danny Road, Hyde Park

On November 3, 2010 at approximately 8:52 AM I received notification from Matt Knowles, Supervisor - Gas Operations, that there was a house explosion on Danny Road in Hyde Park. I informed Bill McCabe at 9:02 AM and arrived on the scene at approximately 9:15 AM. Upon arrival I was briefed by Bill Bowler and Matt Knowles. I was informed at 9:19 AM that the service supplying gas to 17 Reynolds Rd. was capped off at both ends of the severed pipe. The house end was secured with an expansion plug and the main side was capped with an end cap. I instructed Bill Bowler and Matt Knowles to have the area surveyed for gas leaks and I also contacted Gas Supply to have odorant samples taken in the area. I instructed Gas Distribution to locate valves at the intersection of Danny Road. Upon arrival I noticed the gas box cover to the service of at 16 Danny Road was removed and laying on the ground next to the gate box. I also noticed there was a gate stick attached to the service valve and sticking out of the gate box. I asked both Bill Bowler and Matt Knowles if they knew anything about that. Bill stated he did not know whose stick it was but that there was a Boston Firemen near the stick when he arrived. Matt Knowles did not know anything about the gate stick. I asked a DeFelice Corp. employee if it was their gate stick and he replied no. I believe the employee was George DeFelice.

At 9:30 AM I made contact with the Boston Fire Department and the Boston Police Department. They asked that NSTAR Gas stand by for further assistance. I asked the Boston Fire department if they had knowledge of anyone in the house at the time of the incident. They replied they were not sure because there was a car parked in the detached garage.

At 9:40 AM I talked to Bill McCabe and updated him on the incident. Bill McCabe informed me that I was the incident commander. I participated in a conference call at 10:00 AM and briefed the incident central command on the incident at 17 Reynolds Road. Bill McCabe informed me they were working on obtaining any Dig Safe information for the area of the incident.

At 9:50 I held a meeting with all NSTAR Gas personnel on site. I instructed them that I was the incident commander and all information must be communicated to me. I also instructed them to document all their activities. I briefed the group on information pertaining to the incident that I received from the Boston Fire Department. I was informed that the Boston Fire Department requested all customers to be shut off within a 300' radius of the area of Danny Road. I instructed Steve Butler to interview DeFelice Corp. and obtain their Dig Safe and operator information for the Dig Safe violation report. I instructed Matt Knowles to document all activities and Bill Bowler to take pictures of the scene.

I was informed by NSTAR Gas Distribution personnel that the valve located at the intersection of Reedville Street and Danny Road was visible and accessible. The valve at the intersection of Danny Road at Reynolds was not visible or accessible. I was informed DeFelice Construction paved over the box while installing a temporary water main. I instructed the crew to locate the valve and mark out its location. NSTAR needed to locate the valve in case of emergency. I did not have access to one of the key valves and I did not know at this time if the main would need to be shut down. I was not sure of damage caused by the service being pulled at the main. There were no gas readings in the bank of the trench or on the surface of the roadway. I also instructed the crew to mark out the service to # 17 Reynolds Road. The service needed to be marked to perform the service cut off at the main. I instructed Tom Sheehan to assist the crew with plans and also call in an emergency Dig Safe. There were no visible marks at the main on Danny Road except at the service at 16 Danny Road. This was the location that there was a gate stick on the service valve to 16 Danny Road. I noticed the service was marked in the street and the color of the marking did not match our color of paint. I also noted the gate box was not painted and marked. The street mark was not corridor marked a method NSTAR Gas uses regularly. I could not clearly see if the service to 17 Reynolds Road was marked but I could see the service box in the sidewalk in front of the fence. At this time there was a lot of debris and water in the area.

At 11:00 AM I walked Reynolds Road looking for any dig safe marks. I could not find any marks on Reynolds Road at the main in the section from Como Road to the intersection of Danny Road. I did find the service to 12 Reynolds Road was clearly marked in the sidewalk. The road was in poor shape due to excavation recently done and had various types of pavement and unlevelled surfaces. At this time there were a lot of emergency vehicles at the intersection and I could not verify if there were any marks in the intersection of Danny Road @ Reynolds Road.

I was informed by Steve Butler that Defelice Corp. supplied Dig Safe # 201040106693. Steve claimed they were unwilling at this time to supply operator information. I instructed Steve to obtain that information.

At approximately 11:15 AM I met with Boston Police inspectors Joseph McNiff and Arthur Torigian. I was instructed that they needed time to investigate the scene and all employees were asked to stay on the outside of the taped off area. I asked if they needed any assistance and they replied no but did ask me if the service to the house was shut off.

I informed them that the service was capped at both ends of the damaged pipe but I needed to cut and cap the service at the main. I also notified them that we performed a leak survey in the area and did not find any readings of gas.

I met with Jorge Santi from the Department of Public Utilities. Jorge asked me about Dig Safe information and the gas system. I informed Jorge we did have a dig safe ticket for Reynolds Road called in by DeFelice Corporation but did not have one for Danny Road. I explained the dig safe was called in on October 1, 2010 and was marked by NSTAR Gas on October 6, 2010. I also informed Jorge that the gas service to 17 Reynolds Road was capped and secured of both ends of the severed pipe. Jorge stated he would be interviewing DeFelice Corp. and would talk with me at a later time.

At 12:00 PM I participated in a conference call to update the Incident Command Center.

At 12:30 PM I received a call from Bill Kilroy that all Gas Supply samples have been taken and he would forward the results to Mark Gunsalus.

At approximately 1:00 PM I met with Jorge Santi and we discussed the Dig Safe. I informed Jorge that I had walked Reynolds Road from the intersection of Danny Road and Reynolds Road to Como Road. I informed Jorge that I did not see any marks in the roadway. I did mention that 12 Reynolds Road was clearly marked in the sidewalk. We walked to 12 Reynolds Road to verify the service was marked. He asked me why the main was not marked. I stated that the dig safe was completed by NSTAR Gas and I believe the marks were not maintained by DeFelice Corp. The roadway was clearly repaved with binder and there were no marks on the street. We walked to the intersection on Como Road and Reynolds and did not see any visible pre-marks or utility marks in the area. Jorge stated that DeFelice was not required to Premark because the job was over 500'. We did see the trenches from the work that was performed by DeFelice Corp. We then returned to the scene of the incident.

I asked Matt Knowles to measure the street from Como Road to Chesterfield. Matt informed me after measuring Reynolds Road from Como - Chesterfield the total length was 382'.

I was informed by Tom Sheehan that DeFelice Corp. had called in a Freeform Dig Safe ticket on November 2, 2010. I asked who preformed the mark out, he replied Mike Fulton. I was instructed by Bill McCabe to interview Mike Fulton. I instructed Tom Sheehan and Jerry Fay to interview Mike Fulton and obtain a written statement of events. Jerry Fay and Mike Fulton returned to our NSTAR facility to conduct the interview.

At 1:50PM I held a meeting with Tom Sheehan, Jerry Fay, Bill Bowler, Steve Butler and Matt Knowles on the procedure we would use to cut off the service to 17 Reynolds Road at the main. After meeting with the management employees I met with Gas Distribution field employees including Joe Clougherty, Elias Gunsalas, Mike Gavin, Bob Falvey, Steve Davis and Vincent Foxx. Steve Butler conducted the job briefing form and went over the procedure to be followed. Dave Matthews was present during the conversation.

to go over the removal of the service and how it would be handled and transported. The service was cut off at the main at 3:30 PM. The entire service (three pieces) was tagged and secured in vehicle # 094004.

At approximately 4:00PM Bill McCabe arrived on scene. I briefed Billy on what information I had.

I was informed by Jorge Santi that the Boston Police would move materials at the corner of the house where the service entered the building. Jorge and I looked over the foundation wall and had seen where the service entered the structure. The pipe appeared to be severed at the nipple just below the regulator. I recorded pictures of the service. The riser pipe with the meter was able to be removed from the structure and laid on the ground next to the structure. While I was talking to Jorge Santi the Boston Police investigators removed the riser pipe and meter and relocated it across the street to photograph it. We were informed by Boston Police they would need time to photograph the equipment and would notify us when they were complete. The equipment was tagged and transported to vehicle # 094004 at 4:20PM. I instructed Mike Gavin to transport the equipment with Dave Matthews to our Westwood facility.

After the equipment left the scene Jorge Santi and I walked Reynolds Road from the intersection of Danny Road to Chesterfield Road. Jorge claimed there were no marks on the street and the roadway had not been disturbed. I did notice one mark in the street that was barely visible and pointed that out to Jorge. Jorge acknowledged the mark. I also stated the services to numbers 3, 5, and 7 were clearly marked in the sidewalk. Jorge agreed they were marked but still was concerned of no marks in the street. I said that by the looks of the street the contractor was using a power sweeper, I could tell by the groves in the street were completely clean and a push broom does not give that result. I also stated the contractor is responsible to maintain the marks. Jorge agreed the contractor is responsible to maintain their marks if there were any. I pointed to the faded mark in the street and indicated the dig safe was completed on October 7th. I also stated that I did not see any pre-marks in the area and that the roadway was 382' in length not over 500' that he said. Jorge agreed there were no pre-marks in the area and acknowledged the dig safe was not over 500'. Jorge and I walked to the intersection of Reynolds Road and Chesterfield Road. We noticed marks in the sidewalk of numbers 61 and 59 Chesterfield but did not see any marks in the intersection. Jorge and I both noticed pre-marks in the gutter line marked FDR. At this time Jorge or I could not identify who that was. Jorge and I returned to the scene.

DeFelice started their work at the intersection of Danny Road and Reynolds Road. I instructed our crews to watch over them to insure our piping was not damage again. DeFelice used a large front end loader to backfill the opening. The front end loader scraped the roadway to pick up any loose material. DeFelice used a power sweeper to clean the area after excavation. DeFelice finished their work at 7:55PM. I instructed our survey tech to resurvey the area. The survey tech reported no gas readings in the area. I released the crews and left the scene at 8:21 PM.

Subject: November 3, 2010

Location: # 17 Reynold Road Hyde Park / On Danny Road

To: Kevin Kelley/ Incident Commander

From: William T. Bowler

On Wednesday November 3, 2010 at 7:30am, a departmental safety meeting was held; Conducted by Kevin Kelley. Gerry Fay from Safety and Training was present at this meeting in which Kevin assigned two topics to each supervisor to discuss with the distribution personnel. Our Meeting concluded at 8:30am at which time Matt Knowles went over the crew assignment as well as the Job Briefing Sheets. I had returned to my desk to work on the prior day's paper work that included time sheet and activity reports.

At 8:52am Jack Jackson verbally notified Matt Knowles that he had just received a phone call from dispatch of an incident in which an explosion had occurred in Hyde Park on Danny Road. Matt passed the information along to Kevin Kelley and I. Matt Knowles and I proceeded out of the building to take our vehicles to Danny Road. While enroute to the scene of the incident I contacted Joe Clougherty to notify him of the situation and ask him to direct the crew to head to Danny Road in Hyde Park. While traveling south on Hyde Park Avenue in Hyde Park, I noticed Police Vehicles leaving the police station with lights and siren on, Matt and I were able to follow Law Enforcement to the Scene on Danny Road. Our time of arrival was 9 am. The scene to say the least was a gruesome and devastating site to see, staying focused Matt and I assessed the situation and to our discovery found a broom stick handle jammed into the severed one inch steel, twenty five pound pressure gas service.

The Service was located on Danny Road and supplying #17 Reynold Road. It was my assumption that the contractor from Defelice Corporation had hit the service and inserted the broom stick into the pipe in an attempt to stop the gas leak but to no avail, he was only able to slow it down. As the Fire Department was hosing down the building and more Fire Apparatuses were arriving on scene, Matt Knowles and I made a joint decision to make a repair in which we would cut and capped the line creating a safer work environment for all at the site. Matt Knowles notified the Fire Department and we proceeded to cut the line, install an expansion plug and install a one inch style ninety line cap. This made the work area safe. The service was cut and capped at both ends of the severed pipe and completed at 9:19am. I tested the bank towards the gas main to be sure that the line was not pulled out of the 4 inch steel gas main. I recorded a reading of six percent that had dropped down to zero. Fire Personnel asked if we were all set with them and we replied that we were all good.

While doing the cut and cap the distribution crew had arrived and assisted Matt Knowles and I. At one point Steve Davis came into the trench to help out, all distribution personnel arrived on scene within minutes to assist with the capping of the damaged service. By 9:30am I was taking pictures of the scene and documenting my findings, while doing so I noticed that the shut off valve to #17 Reynold Road was partially painted and visible approximately 12 feet from the excavation. There were also some faded main gas marking on Danny Rd. that I photographed .At # 16 Reynold Road across the street from the excavation had a gate stick on the valve in which Matt Knowles was at this time Investigating. Matt Knowles stated that the gate stick belonged to the contractor and a fireman attempted to turn the valve off but, he was unsuccessful. Matt Knowles instructed the firemen not to turn the

valve. I photographed the gate valve and Matt Knowles call Mike Auclair from O'MARK Survey, to survey the area.

At 9:45 am Kevin Kelley held a field meeting which he went over the assignments and prepared us for the worst news. At this time there was no confirmation on whether anyone was inside the house. I was assigned to take pictures and capture any marks or no marks that could be pertinent to the situation. Matt Knowles was assigned to take notes and document all findings. Gas distribution personnel were assigned to check and clear all valves. At 10:15am a second field meeting was held by Kevin Kelley. Kevin identified himself as the incident commander letting everyone know that all information should go through him. We discussed that the gas distribution crew had inspected and cleared the gate valve on Readville Street at Danny Road however; the valve in the intersection of Reynold Road at Danny Road was paved over by the contractor, Defelice Corporation. At this time we discussed a couple of methods in which to cut the damaged service to # 17 Reynold Road at the 4" main to collect the one inch steel service as evidence. In preparation for the different methods we assigned Vincent Foxx and Elias Gonzales to go to the Hyde Park gas facility for the necessary stock in case we shut the main. This also included the 2" Williamson equipment and a 2" stack for the purge. Kevin Kelley wanted all of our options covered to be ready when the Fire Department gave us the go ahead to continue on with our duties on the site.

At approximately 10:45am the supervisor from the Electric side Jeff Donaldson and crew cut and retired the electric service to # 17 Reynold Road. Jeff Donaldson was going to remove the electric meter however the Boston Police sergeant in charge of special operation ;Joseph

McNiff, made it a crime scene and he and other police officers cordoned off the area with safety tape and removed what they deemed unnecessary personnel from the crime scene. This created a standby mode as we waited for the time to complete our assignments to cut the service and retrieve the evidence. At 12:40pm Matt Knowles called Bill Polin to find out if the area would be impacted with a shut down to isolate Danny Road. Bill Polin confirmed at 12:44pm there would be no impact on the area. At approximately 2:00pm another meeting was held with Kevin Kelley and Dave Matthews to discuss the handling of the evidence. All evidence needed to be tagged, marked on the top side, documented and Dave Matthews visually watch the pipe being transferred into a secure vehicle. Just prior to this task the contractor was cutting with a demolition saw on site and Kevin Kelley had them stop due to the sparks from the saw. Bob Falvey and Mike Gavin were assigned to this task and at 2:17pm they cut and removed the severed section and completed the first task. At 2:30pm we had the crew cut the paved over valve box on Danny Rd. at Reynold Road on the Readville Street side to expose the valve box. This was located in a temporary water trench that the contractor, Defelice Corporation had paved making it inaccessible.

At approximately 2:40pm the gas crew cut the street from the severed gas service section to the 4" main location. Joe Clougherty was operating the backhoe and a great deal of hand work was performed to prevent any damage to the evidence. As we discussed, Joe Clougherty and Vincent Foxx had the task to cut and cap the service tee to # 17 Reynold Road on Danny Road. All NSTAR standards were followed and the one inch service was properly tagged and transferred into the secured vehicle at 3:30pm. I assumed we were done however, Dave Matthews spoke with the Fire and Police investigators and they had removed the inside piping.

As soon as they completed their investigation Matt Knowles and I was to tag and transfer the inside meter with the piping attached to the secure vehicle under the guidance of Dave Matthews. At 4:20pm the tagging and transfer assignment was completed. The secured vehicle number was 94004 and the assigned driver was Mike Gavin. At 5:20pm Mike Gavin and Dave Matthews drove to Westwood and stored the evidence in a secured evidence room.

NSTAR GAS SUPERVISOR

William T. Bowler



To: Gerry Griffin
From: John Jackson
Date: November 5, 2010
Subject: 17 Reynold Rd Hyde Park

On Wednesday November 3, 2010 I was informed by Dispatch that a house exploded at 17 Reynold Rd. in Hyde Park. I told Dispatch to immediately send 2 techs to the scene. I then informed Matt Knowles in Distribution of what we knew at this time. I left the Hyde Park service center and headed to the scene and called the service Manager Gerry Griffin to explain what I knew of the event at Reynold Rd. I arrived at the scene at approximately 9:05 AM. When I arrived the Boston Police and Boston Fire department were on the scene along with a contractor doing water work in the street. The building that was located at 17 Reynold Rd was now in complete ruins. The service manager had arrived and we met to discuss a strategy. We decided to have two more techs' meet us at the scene. John Jackson, Gerry Griffin, Dan McGrail, Tom Kane, Paul Nelson, and Derek Johnson met and the plan was to shut off all meters within 300 feet of the explosion in all directions. The plan was executed immediately and the Fire Department scene commander was notified of our strategy. At approximately 11:30 AM all meters had been shut off. The service group met again and we decided to monitor the entire area of any potential leaks that we may have missed. At approximately 2:00PM the scene had been secured and we then began turning back on all the meters we shut off. At approximately 3:30PM all except for 2 customers had been turned back on and each home checked again for any leaks. Gas leak monitoring was continued by the leak survey contractor.

Exhibit 9

Service Valve Photographs:

- 9(a) Gas Service Valve Box Cover of Gas Service supplying 17 Danny Road (11-3-10);
 - 9(b) Gas Service Valve Box in Relation to Damaged Gas Service;
 - 9(c) Broken Gas Service Valve – House Side, supplying 17 Danny Road; and
 - 9(d) Broken Gas Service Valve – Street Side, supplying 17 Danny Road
-



Exhibit 9(a) – Gas Service Valve Box Cover of Gas Service supplying
17 Danny Road (11-3-10)



Exhibit 9(b) – Gas Service Valve Box in Relation to Damaged Gas Service



Exhibit 9(c) – Broken Gas Service Valve – House Side, supplying
17 Danny Road



Exhibit 9(d) – Broken Gas Service Valve – Street Side, supplying
17 Danny Road

Exhibit 10

Photographs of Inside Service at 17 Danny Road:

**10(a) Displaced and Severed Gas Service Piping Inside of
17 Danny Road; and**

**10(b) Service Regulator Severed From the Gas Service
Piping Inside of 17 Danny Road**

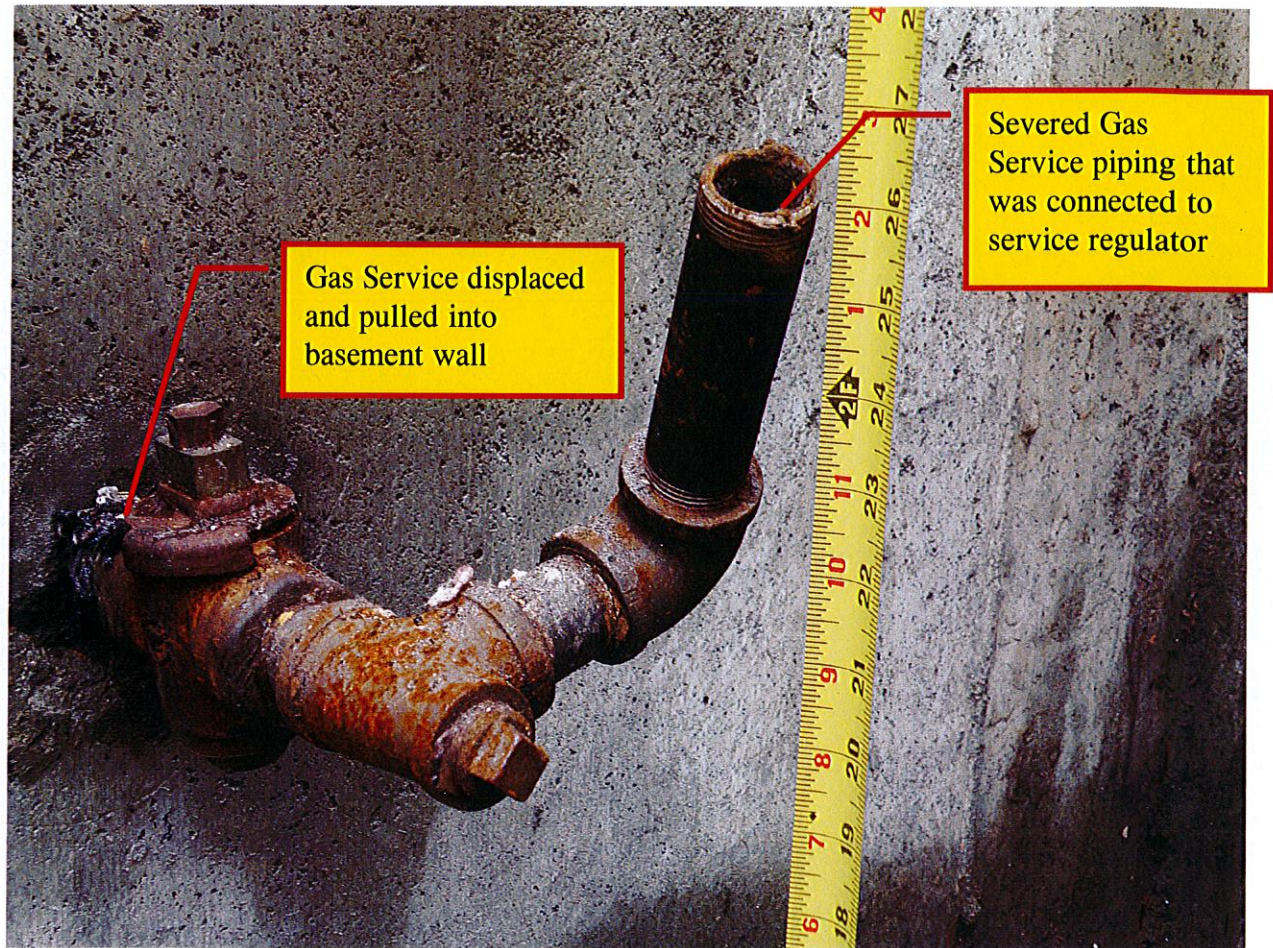


Exhibit 10(a) – Displaced and Severed Gas Service Piping Inside of
17 Danny Road

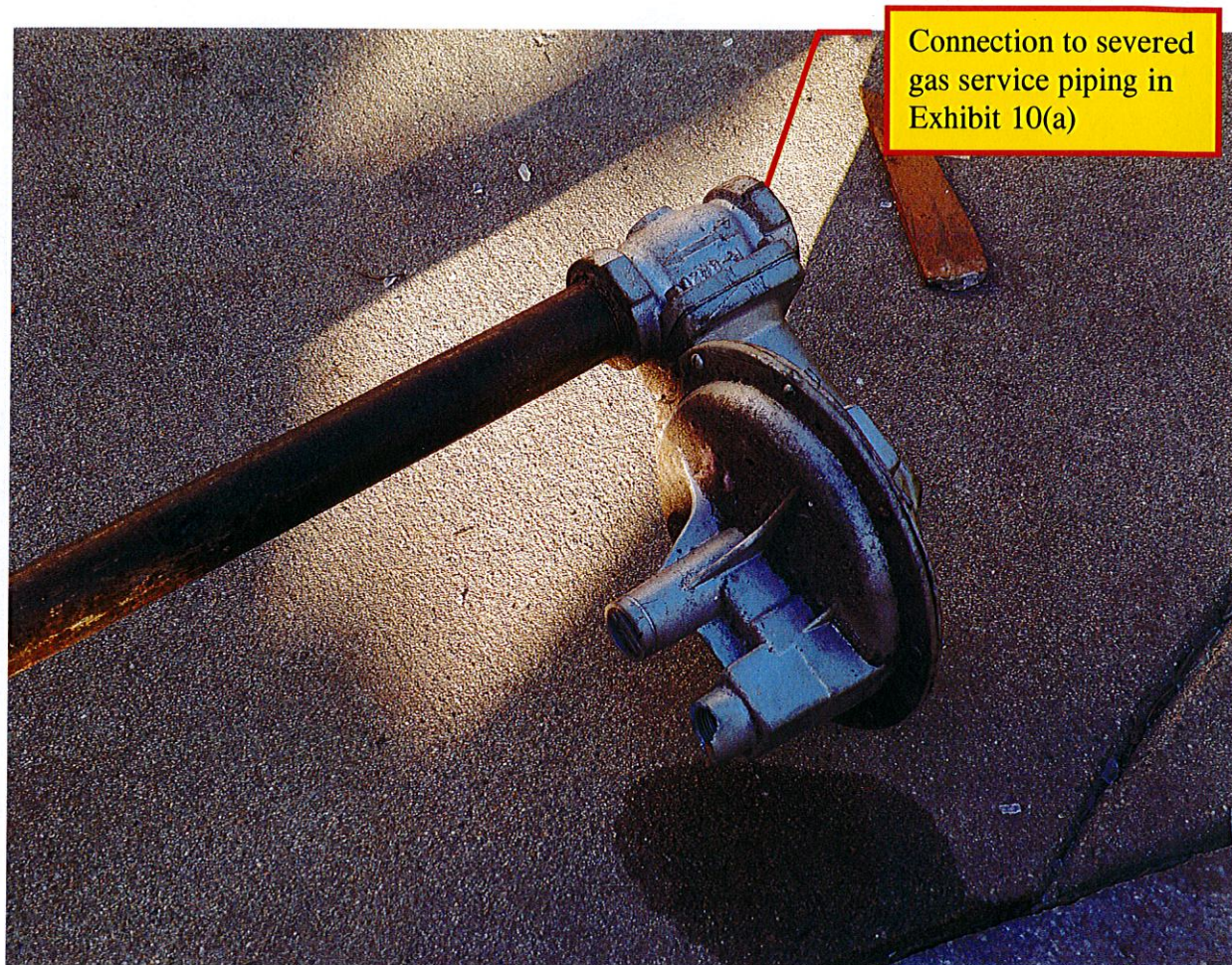


Exhibit 10(b) – Service Regulator Severed from the Gas Service Piping Inside of 17 Danny Road

Exhibit 11

DPU Order, DeFelice, DPU -11-DS-1/11-DS-2 (May 29, 2013)



The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 11-DS-1

May 29, 2013

Adjudicatory Proceeding in the matter of a Notice of Probable Violation issued by the Pipeline Engineering and Safety Division of the Department of Public Utilities to DeFelice Corporation concerning compliance with Dig Safe, Inc., requirements associated with an excavation at Como Road, Boston, Massachusetts.

D.P.U. 11-DS-2

Adjudicatory proceeding in the matter of a Notice of Probable Violation issued by the Pipeline Engineering and Safety Division of the Department of Public Utilities to DeFelice Corporation concerning compliance with Dig Safe, Inc., requirements associated with an incident involving the release of natural gas at Danny Road, Boston, Massachusetts.

APPEARANCE: William H. Stevens, Jr., Esq.
Department of Public Utilities
Pipeline Engineering and Safety Division
One South Station, 5th Floor
Boston, Massachusetts 02110
FOR: PIPELINE ENGINEERING AND SAFETY
DIVISION
Investigator

Andrew W. Daniels, Esq.
Ben N. Dunlap, Esq.
LeClair Ryan
One International Place, 11th Floor
Boston, Massachusetts 02110
FOR: DEFELICE CORPORATION
Respondent

TABLE OF CONTENTS

| | | |
|------|--|----|
| I. | INTRODUCTION | 1 |
| II. | PROCEDURAL BACKGROUND..... | 2 |
| III. | PROCEDURAL RULINGS..... | 5 |
| A. | Prehearing Motion for Approval of Consent Orders | 5 |
| 1. | Introduction..... | 5 |
| 2. | Analysis and Findings..... | 6 |
| B. | Motion to Reopen Record and Admit Post-Hearing Evidence..... | 7 |
| 1. | Introduction..... | 7 |
| 2. | Positions of the Parties..... | 7 |
| 3. | Analysis and Findings..... | 8 |
| IV. | COMPLIANCE WITH DIG SAFE LAWS | 10 |
| A. | Introduction..... | 10 |
| B. | D.P.U. 11-DS-1, Excavation at Como Road..... | 10 |
| 1. | Introduction..... | 10 |
| 2. | Notice to Dig Safe..... | 11 |
| a. | Introduction..... | 11 |
| b. | Positions of the Parties..... | 11 |
| c. | Analysis and Findings..... | 12 |
| 3. | Reasonable Precautions | 14 |
| a. | Introduction..... | 14 |
| b. | Positions of the Parties..... | 14 |
| c. | Analysis and Findings..... | 14 |
| 4. | Civil Penalty..... | 16 |
| C. | D.P.U. 11-DS-2, Excavation at Danny Road..... | 17 |
| 1. | Introduction..... | 17 |
| 2. | Notice to Dig Safe..... | 19 |
| a. | Introduction..... | 19 |
| b. | Positions of the Parties..... | 19 |
| i. | Pipeline Division..... | 19 |
| ii. | DeFelice | 20 |
| c. | Analysis and Findings..... | 22 |
| 3. | Premarking..... | 27 |
| a. | Introduction..... | 27 |
| b. | Positions of the Parties..... | 27 |
| i. | Pipeline Division..... | 27 |
| ii. | DeFelice | 27 |
| c. | Analysis and Findings..... | 29 |
| 4. | Reasonable Precautions | 31 |
| a. | Introduction..... | 31 |

| | | |
|-----|-------------------------------|----|
| b. | Positions of the Parties..... | 31 |
| i. | Pipeline Division..... | 31 |
| ii. | DeFelice | 33 |
| c. | Analysis and Findings..... | 34 |
| 5. | Civil Penalty..... | 36 |
| V. | ORDER..... | 37 |

I. INTRODUCTION

In 2010, DeFelice Corporation (“DeFelice” or “Company”) commenced construction on a contract awarded by the Boston Water and Sewer Commission (“BWSC”) to re-lay water mains and replace and rehabilitate drain and sewer pipes in the Hyde Park, Roslindale, and West Roxbury neighborhoods of Boston, Massachusetts (Exhs. DeFelice 1, at 2, 3 (Como); DeFelice 1, at 2, 3 (Danny); DeFelice 2 (Danny); Tr. at 143).¹ The BWSC contract included bypass piping, involving the removal and reinstallation of the water main, and reconnecting all of the houses to the new water main (Tr. at 143). DeFelice commenced excavation activities in the Hyde Park area at issue in these proceedings in October 2010 (Exhs. DeFelice 1, at 3 (Como); DeFelice 1, at 3 (Danny)).

On November 3, 2010, DeFelice struck a steel gas service line, which resulted in the release of natural gas into the house located at 17 Danny Road (Exhs. DeFelice 9, at 5 (Danny); DeFelice 10, at 3-4 (Danny)). The released gas ignited and caused the complete destruction of the house at 17 Danny Road, significant damage to neighboring families’ houses and could have resulted in personal injury (Exhs. DeFelice 9, at 5 (Danny); PD-CB-1, at 4 (Danny); DPU-PSED 1-6, Att. A at PB030021, PB030022, PB030031, PB030033 (Danny)). As addressed further below, in this Order, the Department (1) finds that DeFelice committed four violations of the Commonwealth’s Dig Safe law, and (2) imposes for each violation the maximum statutorily allowed penalty.

¹ To distinguish between the two separate proceedings that are the subject of this Order, we use the designations “Como” and “Danny” for citation purposes.

II. PROCEDURAL BACKGROUND

After receiving notice of the explosion, the Division of Pipeline and Engineering Safety ("Pipeline Division") of the Department of Public Utilities ("Department") conducted an investigation into the incident (Exhs. PD-CB-1, Att. 1, at 6 (Danny); PD-BH-1, at 4 (Danny); PD-JS-1, at 2 (Danny)).² As a result of its investigation, the Pipeline Division issued two notices of probable violation ("NOPVs") along with consent orders to DeFelice on December 17, 2010, related to work the Company was performing under the BWSC contract. In one NOPV, the Pipeline Division stated that it had reason to believe that DeFelice had performed excavations on or about November 3, 2010, at 31 Como Road at Pine Avenue in Hyde Park without notification to the underground plant damage prevention system, *i.e.*, Dig Safe System, Inc. ("Dig Safe")³ and without complying with the provisions of G.L. c. 82, §§ 40, 40A-40E, which are referred to as the Dig Safe laws⁴ (Exh. PD-CB-1, Att. 1, at 1 (Como)). In the other NOPV, the Pipeline

² The Department has delegated administration and enforcement of G.L. c. 82, §§ 40, 40A-40E, which outline requirements to ensure safe excavations, to the Pipeline Division, including the authority to issue notices of probable violations, conduct informal conferences, and enter into consent orders prior to the request for an adjudicatory hearing before the Department. Order of Delegation, D.P.U. 86-73 (1986); see G.L. c. 164, § 76D.

³ Dig Safe is a non-profit clearinghouse that serves as a message handling service for public utilities, taking information about planned excavations, providing Dig Safe ticket numbers to the callers as proof of notification, and notifying all member utilities with underground facilities of proposed excavations in their areas. Implementation of Abbreviated Dialing Code, D.T.E. 05-82, at 1 (2007); Boston Gas Company, D.T.E. 99-DS-1, at 4 n.2 (2001); Boston Gas Company, D.P.U. 95-DS-2/95-DS-3, at 1 n.1 (1996); see G.L. c. 164, § 76D.

⁴ The Dig Safe laws outline requirements that must be followed when excavations are undertaken, such as premarking by the excavator, notice of proposed excavation to Dig Safe, a waiting period of 72 hours following notice (except in the case of emergency), and designation of underground utility facilities by utilities using standard color-coded

Division stated that it had reason to believe that DeFelice had performed excavations on or about November 3, 2010, on Danny Road in Hyde Park without notification to Dig Safe and without complying with the Dig Safe laws (Exh. PD-CB-1, Att. 1, at 1 (Danny)).

In each NOPV, the Pipeline Division informed DeFelice of its right to dispute the violation either by appearing before a Pipeline Division investigator in an informal conference or by filing a written response (Exhs. PD-CB-1, Att. 1, at 2 (Como); PD-CB-1, Att. 1, at 2 (Danny)). The Pipeline Division also informed DeFelice that if it chose not to dispute the violation, the Company could sign the provided consent order (Exhs. PD-CB-1, Att. 1, at 2 (Como); PD-CB-1, Att. 1, at 2 (Danny)).⁵

Following receipt of the NOPVs, DeFelice requested an informal conference before the Pipeline Division. On February 1, 2011, the Pipeline Division conducted the informal conference regarding the two NOPVs, and on March 1, 2011, the Pipeline Division issued two informal review decisions (Exhs. PD-CB-1, Att. 1 at 5 (Como); PD-CB-1, Att. 1 at 5 (Danny)). In its informal review decisions, the Pipeline Division determined that DeFelice violated the provisions of the Dig Safe laws by failing to tender proper notification to Dig Safe for the excavations (1) in the vicinity of 31 Como Road, and (2) on Danny Road (Exhs. PD-CB-1, Att. 1, at 6 (Como); PD-CB-1, Att. 1, at 6-7 (Danny)). In addition, the Pipeline Division found

markings. G.L. c. 82, §§ 40, 40A-40D. The Dig Safe laws also outline penalties that the Department shall impose when a person or company violates the Dig Safe laws. G.L. c. 82, § 40E.

⁵ Pursuant to 220 C.M.R. § 99.11, a consent order that is signed by the Pipeline Division and the entity to which it is issued constitutes a final Department Order and is not appealable. A consent order need not constitute an admission that a violation has occurred. 220 C.M.R. § 99.11(1).

that DeFelice failed to employ reasonable precaution to avoid damage to underground facilities on both excavations (Exhs. PD-CB-1, Att. 1, at 6 (Como); PD-CB-1, Att. 1, at 7 (Danny)). With respect to the Danny Road excavation, the Pipeline Division also found that the Company failed to premark the excavation area prior to excavation as required by the Dig Safe laws and Department regulations at 220 C.M.R. § 99.03 (Exh. PD-CB-1, Att. 1, at 7 (Danny)).⁶ In each informal review decision, the Pipeline Division informed DeFelice of its right to request an adjudicatory hearing before the Department (Exhs. PD-CB-1, Att. 1, at 6 (Como), citing 220 C.M.R. § 99.08(3); PD-CB-1, Att. 1, at 7 (Danny)).

On March 11, 2011, DeFelice submitted two separate petitions to the Department requesting formal adjudicatory hearings before the Department regarding the Pipeline Division's informal review decisions. The Department docketed the petition regarding the Como Road excavation as D.P.U. 11-DS-1 and docketed the petition regarding the Danny Road excavation as D.P.U. 11-DS-2.⁷ The Department held an evidentiary hearing in the two dockets on September 6, 2012. In D.P.U. 11-DS-1 (Como), the Pipeline Division submitted an initial brief on September 20, 2012; DeFelice did not submit any brief. In D.P.U. 11-DS-2 (Danny), the Pipeline Division and DeFelice submitted initial briefs on September 20, 2012, and reply briefs on October 4, 2012.

⁶ The Dig Safe laws define the term "premark" as "to delineate the general scope of the excavation or boring on the paved surface of the ground using white paint, or stakes or other suitable white markings on nonpaved surfaces. G.L. c. 82, § 40; 220 C.M.R. § 99.02.

⁷ In the interest of administrative efficiency, the Department investigated both proceedings simultaneously, held a joint evidentiary hearing, and issues one joint Order.

In each docket, the Pipeline Division sponsored the testimony of three witnesses:

(1) Christopher J. Bourne, then director of the Pipeline Division; (2) Robert Hayden, the Pipeline Division's Dig Safe compliance officer; and (3) Jorge Santi, then public utilities engineer for the Pipeline Division. In each docket, DeFelice sponsored the testimony of four witnesses:

(1) George DeFelice, president of DeFelice; (2) Robert Savage, vice-president of DeFelice; (3) George Tabicas, operator and foreman for DeFelice; and (4) Manny Medeiros, operator and pipe layer for DeFelice. The evidentiary record in D.P.U. 11-DS-1 (Como) consists of 67 exhibits, and the evidentiary record in D.P.U. 11-DS-2 (Danny) consists of 77 exhibits. In this Order, we first address two procedural rulings and then review the substantive issues regarding DeFelice's compliance with Dig Safe laws.

III. PROCEDURAL RULINGS

A. Prehearing Motion for Approval of Consent Orders

1. Introduction

On September 5, 2012, one day before the evidentiary hearing, DeFelice submitted a prehearing motion for approval of consent orders for each proceeding ("Motion for Consent Orders"). The consent orders that DeFelice asked the Department to approve are substantively similar to the consent orders that the Pipeline Division had originally issued to the Company but which DeFelice did not accept (Motion for Consent Orders at 3 & Exhs. 1, 2). The Pipeline Division did not submit a written response to the Motion for Consent Orders. At the evidentiary hearing on September 6, 2012, the Pipeline Division stated that the submission of the Motion for Consent Orders was not joined by the Pipeline Division and, as such, did not constitute a settlement between DeFelice and the Pipeline Division (Tr. at 9-10).

2. Analysis and Findings

The authority delegated to the Pipeline Division to enforce the Dig Safe laws is limited. Specifically, the Pipeline Division is authorized to enter into a consent order resolving an enforcement issue with a party prior to that party requesting, in writing, an adjudicatory hearing before the Department. Order of Delegation, D.P.U. 86-73, at 2 (1986). Once a party has requested an adjudicatory hearing before the Department, the authority delegated to the Pipeline Division ceases and the Pipeline Division is no longer authorized to enter into a consent order. D.P.U. 86-73, at 2. The Pipeline Division and the party are permitted, however, to enter into a settlement for review by the Department. In this proceeding, the Department specifically informed both the Company and the Pipeline Division that they were permitted to “submit a proposed settlement along with sufficient supporting documentation to permit the Department’s review of the settlement” (Hearing Officer Memorandum at 1-2 (December 16, 2011)).⁸ Ultimately, DeFelice and the Pipeline Division were unable to arrive at a settlement (Motion for Consent Orders at 2; Tr. at 10-12). As such, the Department proceeded with the adjudicatory hearing requested by DeFelice.

While the Department is not precluded from entering into a consent order after a party requests an adjudicatory hearing, we decline to do so here. G.L. 30A, § 10; 220 C.M.R. § 99.11(1). As described in detail below, the circumstances of the alleged violations at issue in

⁸ In assessing the reasonableness of a settlement, the Department’s longstanding practice is to review the entire record to ensure that the settlement is consistent with Department precedent and the public interest. Western Massachusetts Electric Company, D.P.U. 94-12, at 4 (1994); Fitchburg Gas and Electric Light Company, D.P.U. 92-181, at 13-21 (1993); Western Massachusetts Electric Company, D.P.U. 92-13, at 7-10 (1992); Commonwealth Electric Company, D.P.U. 91-200, at 5-9 (1993).

these proceedings concern matters of paramount importance to public safety. As such, it was appropriate to conduct an adjudicatory proceeding to determine the facts and to accord both parties the opportunity to call and examine witnesses, introduce evidence, cross-examine witnesses who testified, and submit rebuttal evidence. Thus, the Motion for Consent Orders is denied.

B. Motion to Reopen Record and Admit Post-Hearing Evidence

1. Introduction

On September 20, 2012, DeFelice submitted a motion for entry of additional information into evidence ("Motion to Reopen Record") in D.P.U. 11-DS-2 (Danny). Specifically, the Company seeks to enter into evidence the Common Ground Alliance Best Practices Manual ("Manual") (Motion to Reopen Record at 1). On September 27, 2012, the Pipeline Division submitted an opposition to the Motion to Reopen Record ("Opposition to Motion").

2. Positions of the Parties

DeFelice asserts that allowance of the Manual into evidence will permit the Department to fully and fairly evaluate the facts and circumstances at issue in this matter by considering all relevant evidence (Motion to Reopen Record at 1). The Pipeline Division outlines three reasons that the Department should deny the inclusion of the Manual in evidence. First, the Pipeline Division asserts that the Company's Motion to Reopen Record is not timely. That is, the Pipeline Division contends that DeFelice did not offer good cause as to why the record should be reopened at this point in the proceedings when the Company had ample opportunity to provide the Manual prior to the close of the record (Opposition to Motion at 2-3). Second, the Pipeline Division asserts that neither its witnesses nor DeFelice's witnesses addressed the Manual in

testimony (Opposition to Motion at 2). As a result, the Pipeline Division maintains that DeFelice inappropriately cross-examined a Pipeline Division witness on a section of the Manual that the witness stated he had not looked at “in a long time” (Opposition to Motion at 2, citing Tr. at 123).⁹ Finally, the Pipeline Division contends that the new evidence that DeFelice seeks to include in the record does not concern a material issue that would be likely to have a significant impact on the Department’s findings and conclusions (Opposition to Motion at 3).

3. Analysis and Findings

The Department’s Procedural Rule at 220 C.M.R. § 1.11(8), states, in pertinent part, “[n]o person may present additional evidence after having rested nor may any hearing be reopened after having been closed, except upon motion and showing of good cause. For purposes of reopening, good cause has been defined as a showing that the proponent has previously unknown or undisclosed information regarding a material issue that would be likely to have a significant impact on the decision.” Machise, D.P.U. 87-AD-12-B at 4-7 (1990); Boston Gas Company, D.P.U. 88-67 (Phase II) at 6-7 (1989); Tennessee Gas Pipeline Company, D.P.U. 85-207-A at 11-12 (1986). The Department also has stated that a party’s presentation of extra-record evidence to the fact-finder after the record has closed is an unacceptable tactic that is potentially prejudicial to the rights of other parties even when the evidence is excluded. D.P.U. 88-67 (Phase II) at 7.

At the evidentiary hearing, the Company conducted cross-examination regarding the Manual of one of the Pipeline Division’s witnesses (Tr. at 122-123). Following that

⁹ The Pipeline Division asks that the Department either strike the responses made by its witness on this line of questioning or give the witness’s responses no evidentiary weight (Opposition to Motion at 2, citing Tr. at 122-123).

cross-examination, the Hearing Officer asked whether the Manual had been introduced into evidence (Tr. at 123). The Company replied “not yet” (Tr. at 123). The Company then waited 14 days to provide the Manual to the Department along with the Motion to Reopen Record and introduce the Manual into evidence. In its Motion to Reopen Record, DeFelice does not provide any justification for its delay in seeking to move the Manual into evidence. Nor does the Company explain why it did not simply ask that the Manual be marked as evidence during the hearing pursuant to ground rules provided by the Department in the Procedural Notice issued on October 17, 2011.¹⁰

In addition, the Department’s Procedural Notice specifically stated that “[e]xhibits offered after the close of the hearings labor under a heavy burden of untimeliness. Late-filed exhibits must be accompanied by a motion to reopen the record and be supported by appropriate affidavits. Only for good cause shown will such exhibits be marked and admitted into evidence” (Procedural Notice at 8, citing 220 C.M.R. §§ 1.04(5), 1.11(8)). Here, the Company has not presented any good cause for why the record should be reopened to admit the Manual when the Company had an opportunity to seek to admit the Manual into evidence at the evidentiary

¹⁰ The Department’s ground rules state that the proponent of an exhibit not in the possession of all parties prior to a hearing must offer the Department two bench copies of the proposed exhibit, pre-marked with (1) the docket number of the proceeding, (2) the exhibit number for identification, and (3) the date the exhibit is offered for identification (Procedural Notice at 7). At the conclusion of the hearing, after discussion of the marked documents by the parties, the hearing officer moves the appropriate documents into the evidentiary record.

hearing. Further, the late-filed Manual was not accompanied by a supporting affidavit. Thus, DeFelice's Motion to Reopen Record and admit the Manual is denied.¹¹

IV. COMPLIANCE WITH DIG SAFE LAWS

A. Introduction

Having denied the Motion for Consent Orders, the Department must determine whether DeFelice complied with the Dig Safe laws in connection with its excavations at 31 Como Road and on Danny Road. See G.L. c. 30A, § 11(8). Here, we describe the incidents leading to the NOPVs and address the following issues: (1) whether DeFelice provided proper notice to Dig Safe prior to the Company's excavation on Como Road; (2) whether the Company employed reasonable precautions to avoid damage to underground facilities on Como Road; (3) whether DeFelice provided proper notice to Dig Safe prior to the Company's excavation on Danny Road; (4) whether the Company premarked the excavation area included in the Dig Safe tickets; and (5) whether the Company employed reasonable precautions to avoid damage to underground facilities on Danny Road.

B. D.P.U. 11-DS-1, Excavation at Como Road

1. Introduction

On or about November 3, 2010, DeFelice cut a trench in the pavement in front of 31 Como Road that extended across the entire road (Exhs. PD-CB-1, at 4 (Como); PD-JS-1, at 3 (Como)). DeFelice used the excavation to install a temporary water line that was tied into an existing fire hydrant across the street from 31 Como Road (Exhs. PD-CB-1, at 4 (Como);

¹¹ The responses by the Pipeline Division witness regarding the Manual are not definitive on any aspect of these proceedings, and, as such, we find it unnecessary to strike those responses (Tr. at 122-123). Nonetheless, the Department does not rely on the responses in deciding any issue in these proceedings.

PD-JS-1, at 3 (Como); PD-JS-2 (Como); PD-JS-3 (Como); PD-JS-4 (Como)). In its informal review, the Pipeline Division determined that DeFelice violated the provisions of the Dig Safe laws because the Company failed to provide appropriate notice of the excavation and employ reasonable precautions for the excavation (Exh. PD-CB-1, Att. 1, at 6 (Como)).

The Department must resolve two issues in D.P.U. 11-DS-1, the Como Road excavation. First, the Department must determine whether DeFelice provided proper notification to Dig Safe pursuant to G.L. c. 82, § 40A, prior to the Company's excavation of the area. Second, the Department must determine whether DeFelice employed reasonable precautions pursuant to G.L. c. 82, § 40C, to avoid damage to any underground facilities. If the Department determines that DeFelice failed with respect to either of these issues, the Department must then determine the appropriate monetary penalty pursuant to G.L. c. 82, § 40E.

2. Notice to Dig Safe

a. Introduction

The first issue the Department must determine is whether DeFelice provided proper notice to Dig Safe pursuant to G.L. c. 82, § 40A, prior to the Company's excavation of the area on Como Road.

b. Positions of the Parties

The Pipeline Division asserts that DeFelice excavated in an extensive area in front of 31 Como Road without notifying Dig Safe and obtaining a Dig Safe ticket (Division Brief at 7 (Como)). The Pipeline Division argues that because DeFelice did not have a Dig Safe ticket, the Company did not give any of the utility operators with underground facilities in the area an opportunity to identify their underground facilities (Division Brief at 7 (Como)). DeFelice did

not submit a brief in D.P.U. 11-DS-1 (Como).¹² Nonetheless, the Company provided testimony and evidence in D.P.U. 11-DS-1 (Como).

c. Analysis and Findings

The Dig Safe laws require an excavator to provide notice of an excavation to Dig Safe at least 72 hours prior to such excavation (except in limited cases, e.g., emergencies). G.L. c. 82, § 40A; 220 C.M.R. 99.04(1). In the notice to Dig Safe, the excavator must describe the excavation location in an accurate manner. G.L. c. 82, §§ 40, 40A; 220 C.M.R. § 99.02.¹³ That is, the excavator must provide sufficient information to accurately define the location of the excavation, such as the names of the streets at the nearest intersection to the excavation and the number of the buildings closest to the excavation. G.L. c. 82, §§ 40, 40A; 220 C.M.R. § 99.02; see Ruscito, D.P.U. 92-DS-1, at 6-7 (1995); Heider Construction, D.P.U. 91-DS-5, at 9-11 (1993).

The purpose of the Dig Safe notification requirement is to provide the excavator with information regarding the existence and location of underground utility services. Memmolo's Case, 17 Mass. App. Ct. 407, 412 & n.6 (1984); Boston Gas Company, D.P.U. 88-DS-30, at 7 (1990); Chandler Construction Company, D.P.U. 87-DS-104, at 5 (1990). The Dig Safe laws are

¹² As noted earlier, DeFelice submitted a brief in D.P.U. 11-DS-2 (Danny) only.

¹³ Prior to 1998, the Dig Safe laws required that an excavator's description be "reasonably accurate" and the Department used this standard in determining whether a company met its notification burden. See, e.g., Heider Construction, Inc., D.P.U. 91-DS-5, at 9-11 (1993); R.J. Cincotta Company, D.P.U. 89-DS-76, at 4 (1990); Toesca Equipment Company, Inc., D.P.U. 89-DS-14, at 4 (1990). In 1998, the Legislature placed a more stringent obligation on excavators by removing the word "reasonably." St. 1998, c. 332; see also Rulemaking Amending Dig Safe Regulations, D.T.E. 98-109 (1999). Since that time, the Department has not had occasion to review any alleged notice violation under this heightened standard.

intended to protect lives and property by imposing strict notice requirements.

17 Mass. App. Ct. 407, 412 & n.6; Heavey Construction and Management Company, D.P.U. 90-DS-3, at 5 (1991); D.P.U. 88-DS-30, at 7; D.P.U. 87-DS-104, at 5. Damage to underground utilities may expose the public and the excavation crew to harm ranging from inconvenience and economic loss to possible fatalities, and enforcement of the Dig Safe laws is the best hedge against such harm. D.P.U. 90-DS-3, at 5.

The record shows that on October 1, 2010, DeFelice contacted Dig Safe and provided notice of an excavation to take place (Exhs. DeFelice 3 (Como) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Como); DeFelice 8, at 2 (Como)). In its notice, DeFelice delineated the area to be excavated as “starting at and including the intersection with Como Road, continuing approximately 500 feet north on Reynold Road and including the intersection of Chesterfield Street” (Exhs. DeFelice 3 (Como) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Como)). The evidence demonstrates, however, that DeFelice excavated outside of the intersection of Como Road and Reynold Road (Exhs. DPU-PESD 1-1, Att. (Como); DPU-PESD 1-2, Att. (Como); Tr. at 95). Specifically, the actual excavation that is at issue in this proceeding took place at 31 Como Road, which is beyond the next intersection to the east of Reynold Road and at the intersection at Como Road and Pine Avenue (Exhs. DPU-PESD 1-1, Att. (Como); DPU-PESD 1-2, Att. (Como); Tr. at 95). Further, the distance from the intersection of Como Road and Reynold Road to the excavation site is 65 feet, which is well outside of the noticed excavation area (Exh. DPU-PESD 1-1, Att. (Como); Tr. at 99; see Exhs. PD-JS-1, at 4 (Como); PD-JS-2 (Como); PD-JS-3 (Como); DPU-PESD 1-8 (Como)).

Based on these factors, we determine that DeFelice's description of the excavation area was not accurate as required by G.L. c. 82, § 40. As such, we find that DeFelice failed to give proper notice to Dig Safe pursuant to G.L. c. 82, § 40A, prior to the Company's excavation of the area.

3. Reasonable Precautions

a. Introduction

The second issue for the Department's determination is whether DeFelice employed reasonable precautions to avoid damage to any underground facilities as required by G.L. c. 82, § 40C.

b. Positions of the Parties

The Pipeline Division asserts that DeFelice excavated with a jackhammer in proximity to unidentified underground gas facilities (Division Brief at 7 (Como)). The Pipeline Division argues that the use of a jackhammer near unidentified gas facilities posed a very significant risk of damaging those underground facilities and created an unsafe condition (Division Brief at 7 (Como)). As noted above, DeFelice did not submit a brief in D.P.U. 11-DS-1 (Como).

c. Analysis and Findings

Under G.L. c. 82, § 40C, when excavating in close proximity to the underground facilities of any company when such facilities are to be exposed, the excavator shall employ, as necessary, non-mechanical means to avoid damage in locating such facilities. See J.B. D'Allessandro Corporation, D.P.U. 91-DS-3, at 5-6 (1993); Fed. Corp., D.P.U. 91-DS-2,

at 5-6 (1992).¹⁴ Any further excavation shall be performed employing reasonable precautions to avoid damage to any underground facilities. See D.P.U. 91-DS-3, at 5-6; D.P.U. 91-DS-2, at 5-6. The Department determines whether precautions taken were reasonable given the facts of each individual case. Umbro & Sons Construction Company, D.P.U. 91-DS-4, at 8 n.3 (1992); Paonessa Construction Company, Inc., D.P.U. 86-DS-78, at 5 (1990). The Dig Safe laws also state that an excavation that occurs without providing the notice required by G.L. c. 82, § 40A, and that results in any damage to a pipe, main, wire or conduit, or its protective coating shall be prima facie evidence in any legal or administrative proceeding that such damage was caused by the negligence of such person. G.L. c. 82, § 40C.

In this case, because DeFelice did not notify Dig Safe that it would be excavating in the specific area at issue, there were no markings indicating the locations of the underground facilities. The Appeals Court has held that a company did not take reasonable precautions to avoid damage to pipes and conduits where it knew that a gas main was located somewhere in the vicinity and made no effort to ascertain the specific location of the underground facilities. Yukna v. Boston Gas Company, 1 Mass. App. Ct. 62, 66 (1972); see also Middlesex Corporation, D.P.U. 87-DS-103, at 6-7 (1990) (Department found that excavator knew or should have known that underground utilities were present and that the operation of heavy equipment in an unmarked area is careless and not an exercise of reasonable precaution). The record shows that DeFelice excavated at 31 Como Road without determining whether there were underground

¹⁴ In 1998, the Dig Safe law was revised to specifically require non-mechanical digging. St. 1998, c. 332; see also Rulemaking Amending Dig Safe Regulations, D.T.E. 98-109 (1999). Since that time, the Department has not had the opportunity to review any alleged notice violation under this standard.

facilities in the area (Exhs. DeFelice 3 (Como) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Como); DPU-PESD 1-1, Att. (Como); DPU-PESD 1-2, Att. (Como); Tr. at 95). As such, we conclude that, in this instance, by undertaking the excavation without any notice to Dig Safe, DeFelice did not exercise reasonable precautions. Thus, we find that DeFelice violated the Dig Safe laws at G.L. c. 82, § 40C by failing to take reasonable precautions in excavating at 31 Como Road.

4. Civil Penalty

General Laws c. 82, § 42E provides that a company found to violate any provisions of the Dig Safe laws shall be fined \$1,000 for a first offense within a twelve-month period and not less than \$5,000 nor more than \$10,000 for any subsequent offense within that same twelve-month period. DeFelice's failure to provide proper notice to Dig Safe prior to the excavation at 31 Como Road constitutes the Company's first offense within a twelve-month period. Thus, the statute requires that the Department impose a \$1,000 penalty on the Company. G.L. c. 82, § 42E.

The Company's failure to exercise reasonable precautions at the excavation at 31 Como Road constitutes the Company's second offense within a twelve-month period.¹⁵ Thus, the statute requires the Department to impose a penalty of no less than \$5,000 and no more than \$10,000. G.L. c. 82, § 42E. In determining the penalty within that range, the Department must consider (1) the nature, circumstances, and gravity of the violation; (2) the degree of the

¹⁵ The Department has previously stated that when we find that the Dig Safe laws have been violated, "we are obligated by law to impose a separate civil penalty for each and every provision of the Dig Safe Law so violated." Boston Gas Company, D.P.U. 95-DS-2/95-DS-3, at 8-9 n.6 (1996).

company's culpability; (3) the company's history of prior offenses; and (4) the company's level of compliance with the requirements of the Department's dig safe regulations. 220 C.M.R. § 99.12(2).

Based on the circumstances of this specific excavation, the Company was fortunate that it did not damage any underground facilities since, as stated previously, it failed to determine whether there were any underground facilities in the area. If damage to underground facilities had occurred, it would greatly increase the gravity of the violation. In considering DeFelice's culpability, we find that the Company is completely culpable since it was excavating in an area outside of any Dig Safe notification. As noted above, this is DeFelice's second offense within the twelve-month period. Finally, the record shows that while DeFelice has, for some areas of its excavation in Hyde Park complied with the requirements of Dig Safe laws, the excavation on Como Road was so far outside of the parameters of the Dig Safe tickets as to raise serious concerns regarding the Company's overall level of compliance with Dig Safe laws (Exhs. DeFelice 3 (Como) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Como); DeFelice 8, at 2 (Como)). Taking these factors as a whole, we impose the maximum statutorily allowed penalty of \$10,000 on the Company.

C. D.P.U. 11-DS-2, Excavation at Danny Road

1. Introduction

On November 3, 2010, DeFelice commenced an excavation at the corner of Reynold Road and Danny Road, and continuing down Danny Road, for a connection to a water main drain pipe (Exhs. DeFelice 9, at 4 (Danny); DeFelice 10, at 3 (Danny); PD-JS-1, at 4-5 (Danny)). During this excavation, the Company encountered and punctured a one-inch steel gas service line

(Exhs. DeFelice 9, at 5 (Danny); DeFelice 10, at 3-4 (Danny); Tr. at 196-197). The damage to the service line released gas into the house located at 17 Danny Road (Tr. at 198-199, 208-209). The released gas then ignited, which caused the house to explode and caused damage to the surrounding houses (see, e.g., Exh. DPU-PSED 1-6, Att. A at PB030031, PB030033; Att. B at PB050166, PB050170; Att. C at PB100011 (Danny); Tr. at 198-199, 208-209). In its informal review, the Pipeline Division determined that DeFelice violated the provisions of the Dig Safe laws, which resulted in extensive property damage, because it failed to provide appropriate notice, premark the excavation area, and employ reasonable precautions (Exhs. PD-CB-1, at 14 & Att. 1, at 6-7 (Danny)).

The Department must resolve three issues in D.P.U. 11-DS-2, the Danny Road excavation. First, the Department must determine whether DeFelice provided proper notification to Dig Safe pursuant to G.L. c. 82, § 40A, prior to the Company's excavation of the area. Second, the Department must determine whether the DeFelice premarked the excavation area outlined in the Dig Safe tickets prior to excavation as required by the Dig Safe laws at G.L. c. 82, § 40B and the Department's regulations at 220 C.M.R. § 99.03. Third, the Department must determine whether DeFelice employed reasonable precautions pursuant to G.L. c. 82, § 40C, to avoid damage to any underground facilities. If the Department determines that DeFelice failed with respect to any of these issues, the Department must determine the appropriate monetary penalty pursuant to G.L. c. 82, § 40E.

2. Notice to Dig Safe

a. Introduction

The Department must first determine whether DeFelice provided proper notice to Dig Safe pursuant to G.L. c. 82, § 40A, prior to the Company's excavation of the area on Danny Road.

b. Positions of the Parties

i. Pipeline Division

The Pipeline Division maintains that an accurate description of the area to be excavated must be expressly stated in any Dig Safe request (Division Brief at 4 (Danny), citing Colonial Gas Company, D.P.U. 86-DS-23, at 3 (1987); Weston Geophysical Corporation, D.P.U. 89-DS-115, at 7 (1993); D.S. Callahan, Inc., D.P.U. 90-DS-50, at 4 (1993)). The Pipeline Division asserts that DeFelice failed to provide an accurate description of the excavation location to Dig Safe, and, as such, the excavation at issue in this proceeding was outside of the scope of the Dig Safe tickets obtained by DeFelice (Division Brief at 12 (Danny); Division Reply Brief at 3 (Danny), citing Exhs. PD-CB-2 (Danny); PD-CB-4 (Danny); PD-CB-5 (Danny); DPU-PESD-1-2, Att. (Danny)).

The Pipeline Division maintains that the Dig Safe tickets obtained by DeFelice stated that the excavation would take place from street to property lines (Division Reply Brief at 3 (Danny), citing Exh. PD-CB-2 (Danny)). The Pipeline Division contends that the exact parameters of the Dig Safe tickets started at, and included, the intersection with Como Road, continued north on Reynold Road to, and including, the intersection with Chesterfield Street (Division Reply Brief at 3 (Danny), citing Exhs. DPU-PESD 1-2, Att. (Danny); PD-CB-2 (Danny)). The Pipeline

Division asserts that DeFelice's excavation in front of 17 Danny Road ended 23 feet away from the curb line at the intersection of Reynold Road and Danny Road and 17 feet away from the property line at the corner of Reynold Road and Danny Road, and, as such, the excavation was outside the Dig Safe tickets (Division Reply Brief at 2-3 (Danny)).

ii. DeFelice

DeFelice asserts that the Company properly notified Dig Safe of its planned excavation by calling Dig Safe more than 72 hours before commencing excavation and giving a proper description of the excavation location (DeFelice Brief at 6, 7 (Danny), citing Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Danny); DeFelice Reply Brief at 2 (Danny)). DeFelice further asserts that it presented un rebutted evidence that the Company contacted Dig Safe and accurately identified the excavation location by using street names and including "all intersections" (DeFelice Brief at 7 (Danny), citing Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); DeFelice 7 (Danny); DeFelice Reply Brief at 3 (Danny)).

Specifically, DeFelice maintains that in its October 1, 2010 call to Dig Safe, the Company identified the location of the excavation as "starting at and including the intersection with Como Road, continuing approximately 500 feet north on Reynold Road to and including the intersection with Chesterfield Street" (DeFelice Brief at 7 (Danny), citing Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Danny)); DeFelice Reply Brief at 2 (Danny)). DeFelice asserts that it identified the start date for the excavation as October 6, 2010, and stated that the extent of the work was from "street to property lines" (DeFelice Brief at 7 (Danny), citing Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls);

DeFelice 4 (Danny); DeFelice Reply Brief at 2 (Danny)). The Company asserts that on November 2, 2010, DeFelice contacted Dig Safe for a remarking of the gas lines and identified the excavation location as "Reynold Road from Como Road to Chesterfield Street including all intersections" (DeFelice Brief at 7 (Danny), citing Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); DeFelice 7 (Danny)); DeFelice Reply Brief at 2 (Danny)).

DeFelice argues that excavators are not required to name all cross streets to properly describe an excavation area, and that any other description that will accurately define the excavation location is acceptable (DeFelice Brief at 7-8 (Danny), citing 220 C.M.R. § 99.02). DeFelice further claims that Dig Safe technicians do not ask for the names of all cross streets and instead prefer to use the term "all intersections" to denote the inclusion of all cross streets (DeFelice Brief at 8 (Danny), citing Tr. at 165). The Company maintains that the Pipeline Division admitted that the term "all intersections" included Danny Road (DeFelice Brief at 8 (Danny), citing Tr. at 82). In addition, DeFelice maintains that it advised Dig Safe that the site had been premarked and that the premarkings done by the Company indicated general excavation 50 feet in an easterly and westerly direction along Danny Road (DeFelice Brief at 8 (Danny)).

DeFelice also argues that NSTAR Gas Company ("NSTAR Gas") marked gas service lines along Danny Road, which is evidence that DeFelice provided proper notification (DeFelice Brief at 9, 20 (Danny), citing Exh. DeFelice 6 (Danny); Tr. at 76, 158, 194). DeFelice further claims that the Company's identification of the excavation location was sufficient as a matter of law (DeFelice Brief at 9 (Danny), citing P. Caliacco Corporation, D.P.U. 86-DS-83 (1993)). In addition, DeFelice maintains that the cases cited by the Pipeline Division in its informal review

decision are not applicable to the instant case. Specifically, DeFelice asserts that in both D.P.U. 86-DS-23 and D.P.U. 90-DS-50, the excavator requested markings at one address yet performed excavation at a separate address, which DeFelice asserts contrasts to the instant proceeding where the Company contends that it requested marking of gas lines 50 feet down Danny Road, included “all intersections” along Reynold Road, and encountered the unmarked gas line in the intersection of Reynold Road and Danny Road (DeFelice Brief at 10 (Danny)). Finally, DeFelice claims that D.P.U. 89-DS-115 is not applicable because in that case, notification to excavate on a public way was not given, and in the instant case, DeFelice asserts it notified Dig Safe of its intention to excavate in the intersection of Reynold Road and Danny Road (DeFelice Brief at 10 (Danny)).

c. Analysis and Findings

As noted in Section IV.B.c., above, to comply with Dig Safe notice requirements, an excavator’s description of the area to be excavated must be accurate. G.L. c. 82, §§ 40, 40A; 220 C.M.R. § 99.02.¹⁶ On October 1, 2010, DeFelice contacted Dig Safe and provided notice of an excavation, and obtained a Dig Safe Ticket (Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Danny)). In its first telephone call to Dig Safe, the Company stated the excavation would take place on Reynold Road and delineated the excavation area as follows: “Begin at and include the intersection of Como Road, continue 500 feet north to and include the intersection at Chesterfield Street” (Exh. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls)). The Company also stated that the work was to be “street to property line”

¹⁶ As noted in footnote 13 above, the issues raised in this Order present the Department’s first opportunity to consider the more stringent obligation on excavators to provide an accurate description rather than a reasonably accurate description. See St. 1998, c. 332.

(Exh. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); see also Exh. DeFelice 4 (Danny)). In the second telephone call to Dig Safe on November 2, 2010, the Company asked whether the initial call included “all intersections” (Exh. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls)). The Dig Safe operator responded that it was “street to property line including intersections” (Exh. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); see also Exh. DeFelice 7 (Danny)).

The area delineated by the Dig Safe ticket could not be more precise. Specifically, the excavation was to take place on Reynold Road from Como Road to Chesterfield Street (Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Danny); see Exh. DPU-PESD 1-2, Att. (Danny)). The excavation would include the complete width of Reynold Road and extend to the property line on each side of Reynold Road (Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Danny)). The intersections of Como Road, Chesterfield Street, and Danny Road would be included only up to the property lines of the houses on either side of each intersection (Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Danny)). Nonetheless, DeFelice focuses on the clarification provided in its re-marking call to Dig Safe of November 2, 2010, that “all intersections” were included and interprets “all intersections” as giving the Company carte blanche to excavate on Danny Road in both an east and west direction from Reynold Road for at least 50 feet (see Exh. DPU-DFC 1-2 (Danny)).¹⁷ Such a contention is in direct violation of Dig

¹⁷ DeFelice interprets its Dig Safe ticket as permitting excavation on Chesterfield Street and Como Road 15 feet beyond the property lines, while it interpreted that same Dig Safe ticket as permitting excavation 50 feet beyond the intersection in both directions on Danny Road (Exh. DPU-DFC 1-2 (Danny)). The Dig Safe laws state that excavators may not excavate beyond the boundaries of the premarked area, i.e., the area delineated in the

Safe law. That is, DeFelice did not provide notice that the Company would be excavating on Danny Road beyond the property line running along Reynold Road and, as such, the notice was not adequate (Exhs. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls); DeFelice 4 (Danny)).¹⁸

The Dig Safe laws are in place to protect against precisely the type of incident that occurred in this instance, i.e., to protect lives and property. 17 Mass. App. Ct. 407, 412 & n.6; D.P.U. 90-DS-3, at 5. In addition, the Dig Safe laws are not draconian in design, and compliance with the Dig Safe laws is not difficult.¹⁹ For DeFelice to provide an accurate description of the excavation to take place on Danny Road (outside of the intersection of Reynold Road and Danny Road), the Company was required to state that the Company intended to excavate on Danny

Dig Safe ticket. G.L. c. 82, § 40B; 220 C.M.R. § 99.05(3). Thus, DeFelice was not permitted to excavate beyond the property line at all.

¹⁸ DeFelice asserts that it was not required to expressly name Danny Road and that the use of “all intersections” sufficed (DeFelice Brief at 8 (Danny); DeFelice Reply Brief at 2 (Danny)). It is best practice when contacting Dig Safe to include the names of all intersections and, in fact, the Dig Safe laws specifically state that the description shall include “the names of the streets at the nearest intersection to the excavation.” G.L. c. 82, § 40; 220 C.M.R. § 99.02; see D.P.U. 91-DS-5, at 10. Nonetheless, even if DeFelice had specifically stated that Danny Road was one of the three intersections connecting to Reynold Road, such a statement would not have provided notice that the Company was excavating on Danny Road, beyond the property line running along Reynold Road.

¹⁹ The key components that an excavator must undertake to comply with Dig Safe law are premarking, contacting Dig Safe to provide an accurate description of the premarked location, and waiting 72 hours to ensure utilities have the opportunity to mark their services. G.L. c. 82, §§ 40A. None of these requirements are burdensome, e.g., it took DeFelice less than two minutes for the initial telephone call and less than one minute for the re-mark telephone call (Exh. DeFelice 3 (Danny) (Recording of Dig Safe Telephone Calls)). Further, DeFelice has been specializing in utility installation for at least 26 years and, thus, should be well-versed in Dig Safe requirements (Exh. DeFelice 1, at 2 (Danny)).

Road, from street to property line, and continuing 50 feet in each direction from the intersection of Reynold Road. G.L. c. 82, § 40; 220 C.M.R. § 99.02. See also D.P.U. 91-DS-5, at 10; D.P.U. 90-DS-50, at 5-6; Todesca Equipment Company, D.P.U. 89-DS-14, at 4-5 (1990); D.P.U. 86-DS-23, at 3-4.²⁰ DeFelice did not provide such a notice.

Instead, absent any Dig Safe notification as to an excavation extending down Danny Road, on November 3, 2010, DeFelice excavated on Danny Road, 17 feet past the property line at the intersection of Reynold Road and Danny Road (Exhs. PD-JS-1, at 4 (Danny); PD-JS-2 (Danny); DPU-PESD 1-1 & Att. 2 (Danny)). And, the only reason that DeFelice did not continue excavating farther down Danny Road in both directions is because the Company struck the gas service line (Exhs. DeFelice 1, at 2; DPU-DFC 1-2; Tr. at 147, 220-221).

DeFelice asserts that the fact that NSTAR Gas marked some gas lines on Danny Road demonstrates that DeFelice provided appropriate notice (DeFelice Brief at 9, 20 (Danny)). The record shows that Company employees verbally asked NSTAR Gas personnel in the general area to mark on Danny Road (Exhs. DeFelice 9, at 3-4 (Danny); Tr. at 186-188). The Department has previously stated that all requests for markings must go through Dig Safe and that the requirement to provide an accurate description to Dig Safe may not be excused by providing notice through other means. J. Derenzo Company, D.P.U. 94-DS-10, at 7 (1997); Fossile

²⁰

DeFelice asserts that D.P.U. 86-DS-23 and D.P.U. 90-DS-50 are inapplicable to the instant case because in both of those cases the excavator requested markings at one address but performed an excavation at a separate address (DeFelice Brief at 10 (Danny)). For similar reasons, DeFelice maintains that D.P.U. 89-DS-115 is inapplicable. In fact, the details in this case are analogous to those cases. That is, DeFelice provided notice that the Company would excavate in one area (i.e., on Reynold Road between Chesterfield Street and Como Road and up to the property line) but then it excavated in a second area (i.e., on Danny Road beyond the property line running along Reynold Road).

Construction Company, D.P.U. 92-DS-23, at 8 (1994); D.P.U. 89-DS-115, at 7; D.P.U. 90-DS-3, at 5. It is not sufficient notice to verbally communicate a marking request as multiple utilities may be located in the same area and it is crucial that notice to all utilities be provided. Toll Brothers, Inc., D.P.U. 91-DS-51, at 6 (1994).²¹

DeFelice also claims that the Company's identification of the excavation location was sufficient as a matter of law (DeFelice Brief at 9 (Danny), citing D.P.U. 86-DS-83). In D.P.U. 86-DS-83, at 9, the Department found that the description of the excavation site given to Dig Safe was reasonable. Nonetheless, in making its ruling, the Department specifically stated:

We caution that this finding should not be construed as precedent for future Dig-Safe descriptions of excavation sites. As previously mentioned, the Department's guidelines for reasonably accurate descriptions of proposed excavation sites has changed since the instant incident occurred Consistent with the regulations, we recommend that excavators be clear and comprehensive in describing the proposed area of excavation.

D.P.U. 86-DS-83, at 9 n.3.

Based on these factors, we determine that DeFelice's description of the excavation area was not accurate as required by G.L. c. 82, § 40. As such, we find that DeFelice failed to give proper notice to Dig Safe pursuant to G.L. c. 82, § 40A, prior to the Company's excavation of the area.

²¹

To ensure that an excavator provides appropriate notice to all utilities that may have facilities located in an area, the Department has specifically alerted utilities that they should not mark sites without proper notice pursuant to a Dig Safe ticket. D.P.U. 94-DS-10, at 7; D.P.U. 92-DS-1, at 6-7 n.4; D.P.U. 90-DS-3, at 6 n.2. See also Construction Solutions, D.P.U. 89-DS-17, at 5-6 n.3 (1993).

3. Premarking

a. Introduction

The second issue the Department must consider is whether DeFelice premarked the excavation area included in the Dig Safe tickets in accordance with G.L. c. 82, § 40A and 220 C.M.R. § 99.03.

b. Positions of the Parties

i. Pipeline Division

The Pipeline Division argues that DeFelice did not premark its excavation on Reynold Road or on Danny Road (Division Brief at 14 (Danny)). The Pipeline Division points out that there is an exemption from the requirement to premark in the case of “any continuous excavation that is over 500 feet in length” (Division Brief at 14 (Danny), citing G.L. c. 82, §§ 40, 40A; Division Reply Brief at 6 (Danny)). The Pipeline Division asserts that the excavation on Reynold Road was no more than 439 feet, and, as such, DeFelice was obligated to premark on Reynold Road (Division Brief at 14 (Danny); Division Reply Brief at 6-7 (Danny), citing Exhs. PD-CB-5 (Danny); DPU-DFC 1-7, Exh. C (Danny); Tr. at 34-36). The Pipeline Division argues that there was no evidence at the scene of the excavation following the incident at Danny Road to suggest that premarking was performed (Division Brief at 14 (Danny); Division Reply Brief at 7-8 (Danny), citing Exhs. PD-RH-1, at 4-6 (Danny); PD-JS-1, at 2-3 (Danny); PD-JS-5 (Danny); PD-CB-1, at 8 (Danny); Tr. at 96-97).

ii. DeFelice

DeFelice contends that the record evidence supports its assertion that it appropriately premarked its excavation on Reynold Road and Danny Road (DeFelice Brief at 10-11, 12, 13-14 (Danny), citing Tr. 149, 166, 201-202; DeFelice Reply Brief at 4-5 (Danny)). For example,

DeFelice claims that the markings used by the Company conform to the Dig Safe regulations, which require only that premarkings are done in white paint (DeFelice Brief at 10-11 (Danny), citing 220 C.M.R. § 99.02; Tr. at 147). DeFelice also maintains that the record shows that its employees witnessed the premarkings (DeFelice Brief at 13-14 (Danny), citing Tr. at 173-174, 201-202). In addition, the Company contends that prior to the re-mark call on November 2, 2010, the Danny Road excavation had been premarked and saw cut (DeFelice Brief at 16 (Danny), citing Tr. at 192). DeFelice also maintains that the Dig Safe ticket indicates that the excavation area had been premarked (DeFelice Brief at 12 (Danny), citing Exh. DeFelice 4 (Danny); DeFelice Reply Brief at 5 (Danny)). Further, DeFelice argues that the documentation provided by NSTAR Gas indicates that the excavation was premarked and that the Pipeline Division conceded that it had no basis to dispute NSTAR Gas's observation (DeFelice Brief at 12-13 (Danny), citing Exh. DPU-PESD 1-3 (Danny); Tr. at 67-68; DeFelice Reply Brief at 5 (Danny)).

DeFelice also asserts that NSTAR Gas actually marked the gas service approximately 47 feet down Danny Road, including the gas main and the gas service line to 16 Danny Road, but did not mark the gas service to 17 Danny Road (DeFelice Brief at 18 (Danny), citing Tr. 159, 160-161; 194; DeFelice Reply Brief at 6 (Danny), citing Tr. 159, 194). The Company asserts that NSTAR Gas's marking of the gas lines on Danny Road demonstrates, as a matter of law, that DeFelice's premarking was sufficient (DeFelice Brief at 20 (Danny), citing Boston Gas Company, D.T.E. 99-DS-1 (2001)).

The Company maintains that the Pipeline Division's assertion that DeFelice failed to premark the excavation area is based only on a visual inspection after the excavation took place

(DeFelice Brief at 14-15 (Danny), citing Tr. at 55-56, 64 115). As such, DeFelice argues that the Pipeline Division's evidence is insufficient to rebut the DeFelice testimony, the contemporaneous communications to Dig Safe that the excavation was premarked, the NSTAR Gas report affirming premarking, and the actual marking by NSTAR Gas (DeFelice Brief at 15-16 (Danny); DeFelice Reply Brief at 3 (Danny)).

DeFelice also argues that, although the Company premarked the excavation area, it was not required to do so by the Dig Safe laws (DeFelice Brief at 16 (Danny), citing G.L. c. 82, § 40). Specifically, DeFelice asserts that the Dig Safe laws do not require premarking of any continuous excavation that is over 500 feet in length (DeFelice Brief at 16 (Danny), citing G.L. c. 82, § 40). DeFelice claims that while the excavation along Reynold Road was surveyed at less than 500 feet, the total length of the continuous excavation exceeded 500 feet because the excavation at the intersections would be included (DeFelice Brief at 16 (Danny), citing Exh. DPU-DFC-1-9, Att. B (Danny)).

c. Analysis and Findings

The Dig Safe law requires excavators to premark the excavation area prior to notifying Dig Safe of their intent to excavate. G.L. c. 82, § 40A; 220 C.M.R. § 99.03(1). There is an exemption to the requirement to premark for any continuous excavation that is over 500 feet in length. G.L. c. 82, § 40.

The evidence supports a finding that the Company premarked the excavation area outlined on the Dig Safe ticket prior to calling Dig Safe on October 1, 2010.²² Specifically,

²² The Pipeline Division's argument regarding premarking focuses on the Company's failure to premark the area noticed in the Dig Safe Ticket. The Pipeline Division does not argue that the Company's failure to provide notice of excavation on Danny Road

DeFelice personnel either undertook the premarking or personally witnessed the premarkings after they were in place (see, e.g., Exhs. DeFelice-1, at 2 (Danny); DeFelice-8, at 1 (Danny); DeFelice-9, at 2 (Danny); Tr. at 149, 166, 201-202). On October 6, 2010, when NSTAR Gas marked its facilities on Reynold Road pursuant to the October 1, 2010 Dig Safe ticket, NSTAR Gas noted on its report sheet²³ that the area had been premarked (Exhs. PD-CB-2, at 2 (Danny); DPU-PESD 1-3 (Danny); Tr. at 67-68). On November 2, 2013, when NSTAR Gas re-marked its facilities in the excavation area, it again noted on its report sheet that the area had been premarked (Exh. DPU-PESD 1-3, Att. at 2 (Danny)). There is nothing in the record to support a finding that NSTAR Gas would have noted the area was premarked had it not been so (see, e.g., Tr. at 114-118).

In addition, the record shows that the Pipeline Division did not inspect the site prior to the incident at issue in this proceeding (Tr. at 55-56). In fact, the Pipeline Division only inspected the site on or after November 3, 2010, in response to the incident (Exhs. PD-CB-1, at 8 (Danny); PD-BH-1, at 4 (Danny); PD-JS-1, at 2-3 (Danny)). As such, at the time the Pipeline Division inspected the site, almost one month had passed since the Company had premarked the area pursuant to its October 1, 2010 Dig Safe Ticket (Exhs. DeFelice-1, at 2 (Danny);

beyond the property line also constituted a failure to comply with the Dig Safe law premarking requirements. However, even if the Pipeline Division had made such an argument, the evidence in this case demonstrates that both the noticed and unnoticed areas were premarked (see, e.g., Exhs. DeFelice-1, at 2 (Danny); DeFelice-8, at 1 (Danny); PD-CB-2, at 2 (Danny)).

²³ The report sheet used by NSTAR Gas is a one-page form that includes the information from the Dig Safe ticket on the top half and a fillable form to be used by NSTAR Gas's markout personnel on site on the bottom half (see, e.g., Exh. DPU-PESD 1-3, Att. at 1-2 (Danny)).

DeFelice-8, at 2 (Danny); PD-CB-2, at 2 (Danny); PD-BH-1, at 3 (Danny); PD-JS-1, at 2-3 (Danny)). Further, at the time of its inspection, the Pipeline Division witnessed a disturbed site that had been affected not only by the explosion, but by ongoing excavation and repaving over the prior month (Exhs. PD-CB-1, at 8 (Danny); PD-BH-1, at 4 (Danny); PD-JS-1, at 2-3 (Danny); Tr. at 58-59, 64, 115, 133-134). Therefore, based on the evidence, we find that DeFelice appropriately premarked the excavation area as outlined in the Dig Safe tickets.²⁴

4. Reasonable Precautions

a. Introduction

The third issue for the Department's determination is whether DeFelice employed reasonable precautions to avoid damage to any underground facilities in compliance with G.L. c. 82, § 40C.

b. Positions of the Parties

i. Pipeline Division

The Pipeline Division asserts that DeFelice knew that it would be performing an excavation on Danny Road as a part of the BWSC contract and yet proceeded with the excavation on Danny Road without notifying Dig Safe (Division Brief at 12 (Danny), citing Exhs. DPU-DFC-1-7. exh. C (Danny); PD-CB-4 (Danny); PD-CB-5 (Danny)). The Pipeline Division asserts that DeFelice's actions are, as a matter of law, prima facie evidence that its negligence caused the damage at 17 Danny Road (Division Brief at 13 (Danny), citing G.L.c. 82, § 40C; Division Reply Brief at 6 (Danny)).

²⁴ Although we have found that there is no violation with respect to DeFelice's premarking of the excavation area as delineated by the Dig Safe ticket, we also find that the Company did not appropriately provide notice for all of the areas it premarked. Premarking does not legally satisfy the notice requirements. G.L. c. 82, § 40A.

In addition, the Pipeline Division argues that DeFelice's failure to exercise adequate precaution is demonstrated by the fact that the Company paved over a gas main valve box at the intersection of Reynold Road and Danny Road in the weeks prior to the incident at issue here (Division Brief at 13 (Danny); Division Reply Brief at 4-5 (Danny), citing Exhs. PD-JS-2 (Danny); PD-JS-4 (Danny); PD-JS-4B (Danny); Tr. at 45-46, 182-183, 192). The Pipeline Division asserts that the presence of the gas main valve box should have alerted the Company that there were gas facilities (i.e., mains and services) in the immediate area (Division Brief at 13 (Danny); Division Reply Brief at 4-5 (Danny), citing Exhs. PD-JS-2 (Danny); PD-JS-4 (Danny); PD-JS-4B (Danny)). The Pipeline Division also contends that, at the time of the incident, the Company excavated in close proximity to a gas service valve box (Division Brief at 13 (Danny); Division Reply Brief at 4-5 (Danny), citing Exhs. PD-JS-1, at 4 (Danny); PD-JS-3 (Danny); DeFelice 5 (Danny)). Specifically, the Pipeline Division states that the gas service valve box was visible in the sidewalk, located a few feet from the excavation site on Danny Road, and the service line extended to the gas main at the intersection of Reynold Road and Danny Road, which again should have alerted DeFelice that it was excavating near gas facilities (Division Brief at 13 (Danny); Division Reply Brief at 4 (Danny), citing Exhs. PD-JS-1, at 4 (Danny); PD-JS-3 (Danny); DeFelice 5 (Danny)). The Pipeline Division further argues that DeFelice used mechanical means to excavate in close proximity to the gas facilities, which demonstrates a failure to exercise reasonable precaution (Division Brief at 13 (Danny); Division Reply Brief at 5 (Danny)).

ii. DeFelice

DeFelice asserts that the evidence demonstrates that it employed reasonable precautions to avoid damage to any gas lines as required by 220 C.M.R. § 99.06 (DeFelice Brief at 21 (Danny)). DeFelice contends that it employed reasonable precautions during the design phase and through the premarking and notification activities (DeFelice Brief at 21 (Danny)). The Company further asserts that it continued such reasonable precautions when it used appropriate care to observe marks on the street and proceeded with manual digging when in proximity to the encountered line (DeFelice Brief at 21 (Danny)).

DeFelice contends that the damage to the gas line was the result of NSTAR Gas's failure to appropriately mark all gas service on Danny Road (DeFelice Brief at 17, 21, 25 (Danny); DeFelice Reply Brief at 6 (Danny)). Specifically, the Company asserts that because the premarked area extended 50 feet in an easterly and westerly direction on Danny Road, NSTAR Gas's markings should have extended at least 65 feet from the gate valve at the intersection of Reynold Road and Danny Road, which would have included the service to 17 Danny Road (DeFelice Brief at 24 (Danny), citing Tr. at 173-175). As an alternative, DeFelice asserts that if NSTAR Gas considered the excavation to exceed 500 feet, NSTAR Gas should have marked at least 15 feet from the property line, which again, would have included the service to 17 Danny Road (DeFelice Brief at 17, 24 (Danny), citing Tr. at 74).

In addition, DeFelice maintains that NSTAR Gas participated in the design process for the project and was provided with a set of plans showing the exact excavation locations and, as such, should have known where DeFelice was excavating (DeFelice Brief at 21 (Danny), citing Tr. at 151-152). DeFelice also argues that it encountered other unmarked utilities while working

in the vicinity, which DeFelice asserts is further proof of NSTAR Gas's failure to appropriately mark gas service on the project (DeFelice Brief at 21-22 (Danny), citing Exhs. DeFelice 1 (Danny); DeFelice 9 (Danny); Tr. at 186-187).

c. Analysis and Findings

Under G.L. c. 82, § 40C, when excavating in close proximity to the underground facilities of any company when such facilities are to be exposed, the excavator shall employ, as necessary, non-mechanical means to avoid damage in locating such facilities. See D.P.U. 91-DS-3, at 5-6; D.P.U. 91-DS-2, at 5-6.²⁵ Any further excavation shall be performed employing reasonable precautions to avoid damage to any underground facilities. See D.P.U. 91-DS-3, at 5-6; D.P.U. 91-DS-2, at 5-6. The Department determines whether precautions taken were reasonable given the facts of each individual case. D.P.U. 91-DS-4, at 8 n.3; D.P.U. 86-DS-78, at 5. The Dig Safe laws also state that an excavation that occurs without providing the notice required by G.L. c. 82, § 40A, and that results in any damage to a pipe, main, wire or conduit, or its protective coating shall be prima facie evidence in any legal or administrative proceeding that such damage was caused by the negligence of such person. G.L. c. 82, § 40C.

The Department has determined in Section IV.C.2.c., above, that DeFelice did not provide proper notice to Dig Safe under G.L. c. 82, § 40A, prior to the Company's excavation of the area. In addition, when DeFelice encountered and punctured the gas service line, it resulted

²⁵

As noted in footnote 14 above, the Dig Safe law was revised to specifically require non-mechanical digging. St. 1998, c. 332. This is the first Order in which the Department has had an opportunity to review an alleged notice violation under this standard.

in specific and extensive damage to the house located at 17 Danny Road as well as to the surrounding properties (see, e.g., Exh. DPU-PSED 1-6, Att. A at PB030031, PB030033; Att. B at PB050166, PB050170 (Danny)). Thus, by the plain language of G.L. c. 82, § 40C, DeFelice's failure to provide proper notice and the resulting damage are prima facie evidence that the damage was caused by the Company's negligence.

The Company did not provide any evidence to rebut this determination, and, instead, simply maintains that it exercised reasonable precautions when it proceeded with manual digging when in proximity to the encountered line (DeFelice Brief at 21 (Danny)). The record shows, however, that DeFelice was using an excavator at the time it encountered the line and only began manual digging to determine the type of obstruction that the Company had encountered (Exhs. DeFelice 9, at 4-5 (Danny); DeFelice 10, at 3 (Danny); Tr. at 178, 196-197, 206).

DeFelice also seeks to shift the responsibility for the damage at issue in this matter to NSTAR Gas by claiming that NSTAR Gas failed to appropriately mark gas service on Danny Road (DeFelice Brief at 21-25 (Danny)). Specifically, DeFelice asserts that NSTAR Gas was involved in the design process, that the Company asked NSTAR Gas personnel to mark out the excavation area, and that NSTAR Gas should have marked gas service in a manner that included the service to 17 Danny Road (DeFelice Brief at 21-25 (Danny)).²⁶ The Department has

²⁶

DeFelice asserts that NSTAR Gas was obligated to mark 15 feet past the property line (DeFelice Brief at 17, 21). While utilities are required to mark 15 feet beyond the premarked area (i.e., the area delineated by the Dig Safe ticket), excavators are not permitted to excavate in this 15-foot area (see Tr. at 84, 103-105). G.L. c. 82, § 40B; 220 C.M.R. § 99.05(3). Whether NSTAR Gas marked along Reynold Road in the 15-foot buffer zone is not within the scope of this proceeding and there is no evidence that NSTAR Gas failed to mark the 15-foot area. The bottom line is that DeFelice was not permitted to excavate beyond the property line. G.L. c. 82, § 40B; 220 C.M.R. § 99.05(3).

determined in Section IV.C.2.c., above, that DeFelice did not provide notice to Dig Safe of the excavation it conducted on Danny Road. Thus, there was no requirement that NSTAR Gas mark the area at issue in this proceeding. In addition, these arguments are not relevant to whether DeFelice exercised reasonable precautions. The fact a utility has access to site plans does not waive an excavator's responsibility to contact Dig Safe. D.P.U. 94-DS-10, at 7. In addition, requests to a utility's personnel are not an adequate substitute for the requirement that Dig Safe be notified. D.P.U. 92-DS-23, at 8; Construction Solutions, D.P.U. 89-DS-17, at 5-6 (1993). To ensure that an excavator provides appropriate notice, the Department has specifically found that utility representatives should not mark sites without proper notice. D.P.U. 94-DS-10, at 7; D.P.U. 90-DS-3, at 6 n.2. See also D.P.U. 89-DS-17, at 5-6 n.3. Based on these factors, we find that DeFelice violated the Dig Safe laws by failing to take reasonable precautions in violation of G.L. c. 82, § 40C in excavating on Danny Road.

5. Civil Penalty

DeFelice's failure to provide proper notice to Dig Safe prior to the excavation at Danny Road constitutes the Company's third offense within a twelve-month period.²⁷ And the Company's failure to exercise reasonable precautions at the excavation on Danny Road constitutes the Company's fourth offense within a twelve-month period. The Pipeline Division asserts that because the Company had multiple Dig Safe violations at the Danny Road location preceded by violations at the Como Road location, the Department should assess the maximum fine (Division Brief at 11, 14 n. 11 (Danny)).

²⁷ The Department's standard of review for assessing penalties is outlined in Section IV.B.4., above.

The nature and circumstances of this specific excavation involve a situation in which the Company did not provide the appropriate Dig Safe notice and, as such, did not determine whether there were any underground facilities in the area. Because the Company's excavation caused damage to the underground gas facilities that resulted in the explosion of one house and damage to the surrounding neighborhood, the violation is of the utmost gravity. That is, the Company's failure to comply with the Dig Safe laws constitutes a serious offense that resulted in the complete destruction of one family's home, significant damage to neighboring families' homes, and could have resulted in personal injury. In considering DeFelice's culpability, we find that the Company is completely culpable since it was excavating in an area outside of any Dig Safe notification. As noted above, these are DeFelice's third and fourth offenses within the twelve-month period. We find that the two incidents are sufficient to establish a pattern of disregard for the Dig Safe laws by the Company. Considering the factors as a whole, we impose the maximum statutorily allowed for penalties; \$10,000 for the third offense, and \$10,000 for the fourth offense.

V. ORDER

Accordingly, after due notice, hearing, and consideration, it is

FOUND: That DeFelice Corporation failed to provide proper notification to Dig Safe Systems, Inc., pursuant to G.L. c. 82, § 40A, prior to the Company's excavation of the area at 31 Como Road; and it is

FURTHER FOUND: That DeFelice Corporation violated the Dig Safe laws at G.L. c. 82, § 40C by failing to take reasonable precautions to avoid damage to underground facilities at 31 Como Road; and it is

FURTHER FOUND: That DeFelice Corporation failed to provide proper notification to Dig Safe Systems, Inc., pursuant to G.L. c. 82, § 40A, prior to the Company's excavation of the area on Danny Road; and it is

FURTHER FOUND: That DeFelice Corporation violated the Dig Safe laws at G.L. c. 82, § 40C by failing to take reasonable precautions to avoid damage to underground facilities at Danny Road; and it is

ORDERED: That DeFelice Corporation shall pay a civil penalty of \$31,000, the maximum civil penalty allowed by statute under the circumstances, to the Commonwealth of Massachusetts; and it is

FURTHER ORDERED: That DeFelice Corporation shall comply with all other directives contained in this Order.

By Order of the Department,

/s/
Ann G. Berwick, Chair

/s/
Jolette A. Westbrook, Commissioner

/s/
David W. Cash, Commissioner

An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5.